Access DB# 92709

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Gerstl Examiner #: 59472 Date: 4/24/03
Art Unit: 1626 Phone Number 30 4531 Serial Number: 09/895,812
Mail Box and Bldg/Room Location: 3B04 Results Format Preferred (circle): PAPER DISK E-MAIL
3D19

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

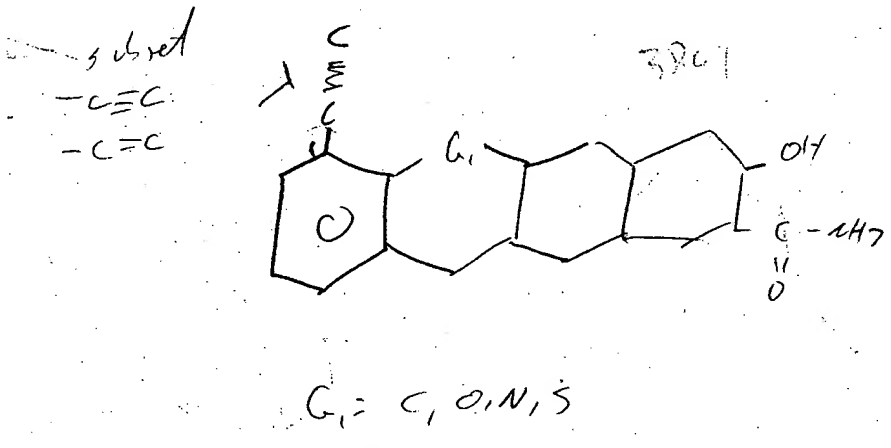
Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**



Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

****

STAFF USE ONLY

Searcher: _____
Searcher Phone #: 4496
Searcher Location: _____
Date Searcher Picked Up: 4/24/03
Date Completed: 4/24/03
Searcher Prep & Review Time: _____
Clerical Prep Time: 10
Online Time: 0

Type of Search

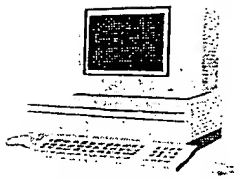
NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) ✓
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN ✓
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

PTO-1590 (8-01)

BioTech-Chem Library
Search Results
Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact ***the BioTech-Chem searcher*** who conducted the search ***or contact***:

Mary Hale, Supervisor, 308-4258
CM-1 Room 1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* *(Example: 1610)*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found**:*
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Search results were not useful in determining patentability or understanding the invention.

Other Comments:

Drop off completed forms at the **Circulation Desk CM-1**, or send to Mary Hale, **CM1-1E01 or e-mail mary.hale@uspto.gov.**

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 12:18:00 ON 29 APR 2003
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   27 APR 2003  HIGHEST RN 506405-59-0
DICTIONARY FILE UPDATES:  27 APR 2003  HIGHEST RN 506405-59-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d sta que l6
L1              STR
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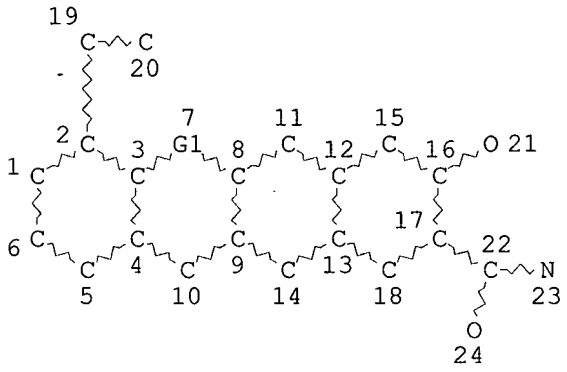


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   1
NUMBER OF NODES IS  24

STEREO ATTRIBUTES: NONE
L3          166 SEA FILE=REGISTRY SSS FUL L1
L4              STR
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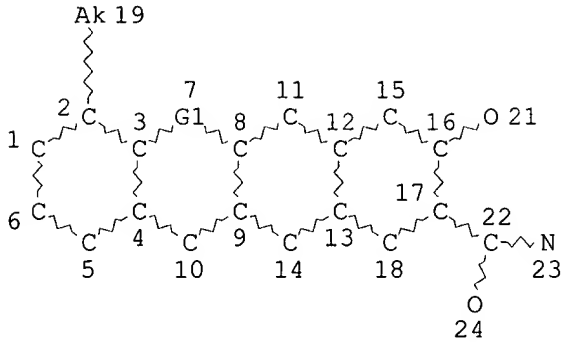
Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

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GGCAT   IS UNS  AT  19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   2
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE
L6           91 SEA FILE=REGISTRY SUB=L3 SSS FUL L4

100.0% PROCESSED    166 ITERATIONS                          91 ANSWERS
SEARCH TIME: 00.00.01


=> d his l6-

     (FILE 'REGISTRY' ENTERED AT 12:12:19 ON 29 APR 2003)
L6           91 S L4 FUL SUB=L3
                SAV L6 GERSTL895A/A TEMP
L7           75 S L3 NOT L6

     FILE 'HCAPLUS' ENTERED AT 12:15:00 ON 29 APR 2003
L8            9 S L6
L9            6 S L7
L10           6 S L8 AND L9
L11           9 S L8-L10
L12           9 S L11 AND (NELSON ? OR FRECHETTE ? OR VISKI ? OR ISMAIL ? OR BO

     FILE 'HCAPLUS' ENTERED AT 12:17:19 ON 29 APR 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:17:23 ON 29 APR 2003
L13           3 S L6
L14           2 S L7
L15           3 S L13,L14

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 12:17:39 ON 29 APR 2003
L16          12 DUP REM L12 L15 (0 DUPLICATES REMOVED)

     FILE 'REGISTRY' ENTERED AT 12:18:00 ON 29 APR 2003

=> fil uspatall
FILE 'USPATFULL' ENTERED AT 12:18:15 ON 29 APR 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE 'USPAT2' ENTERED AT 12:18:15 ON 29 APR 2003

=> d l15 bib abs hitrn fhitstr tot

L15 ANSWER 1 OF 3 USPATFULL
AN 2003:79098 USPATFULL
TI 7-substituted tetracycline compounds
IN Nelson, Mark L., Wellesley, MA, UNITED STATES
Frechette, Roger, Reading, MA, UNITED STATES
Viski, Peter, Brookline, MA, UNITED STATES
Ismail, Mohamed, Bedrford, MA, UNITED STATES
Bowser, Todd, Charlton, MA, UNITED STATES
Bhatia, Beena, Arlington, MA, UNITED STATES
Messersmith, David, Somerville, MA, UNITED STATES
McIntyre, Laura, Arlington, MA, UNITED STATES
Koza, Darrell, Westerly, RI, UNITED STATES
Rennie, Glen, Weymouth, MA, UNITED STATES
Sheahan, Paul, Hopkinton, MA, UNITED STATES
Hawkins, Paul, Cambridge, MA, UNITED STATES
Verma, Atul, Arlington, MA, UNITED STATES
Warchol, Tadeusz, Acton, MA, UNITED STATES
Bandarage, Upul, Newton, MA, UNITED STATES
PI US 2003055025 A1 20030320
AI US 2001-895812 A1 20010629 (9)
PRAI US 2001-275576P 20010313 (60)
US 2000-216760P 20000707 (60)
DT Utility
FS APPLICATION
LREP Elizabeth A. Hanley, Esq., Lahive & Cockfield, LLP, 28 State Street, Boston, MA, 02109
CLMN Number of Claims: 88
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2462
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention pertains, at least in part, to novel 7-substituted tetracycline compounds. These tetracycline compounds can be used to treat numerous tetracycline compound-responsive states, such as bacterial infections and neoplasms, as well as other known applications for minocycline and tetracycline compounds in general, such as blocking tetracycline efflux and modulation of gene expression.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **389624-36-6P**
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT **389623-84-1P 389623-86-3P 389623-89-6P**
389623-90-9P 389623-91-0P 389623-98-7P
389623-99-8P 389624-00-4P 389624-01-5P
389624-02-6P 389624-06-0P 389624-08-2P
389624-09-3P 389624-10-6P 389624-11-7P
389624-14-0P 389624-15-1P 389624-16-2P
389624-17-3P 389624-18-4P 389624-19-5P
389624-20-8P 389624-25-3P 389624-26-4P
389624-27-5P 389624-30-0P 389624-31-1P
389624-32-2P 389624-33-3P 389624-35-5P
389624-37-7P 389624-38-8P 389624-39-9P
389624-40-2P 389624-41-3P 389624-42-4P
389624-43-5P 389624-44-6P 389624-46-8P
389624-47-9P 389624-48-0P 389624-49-1P
389624-50-4P 389624-51-5P 389624-52-6P
389624-53-7P 389624-56-0P 389624-60-6P

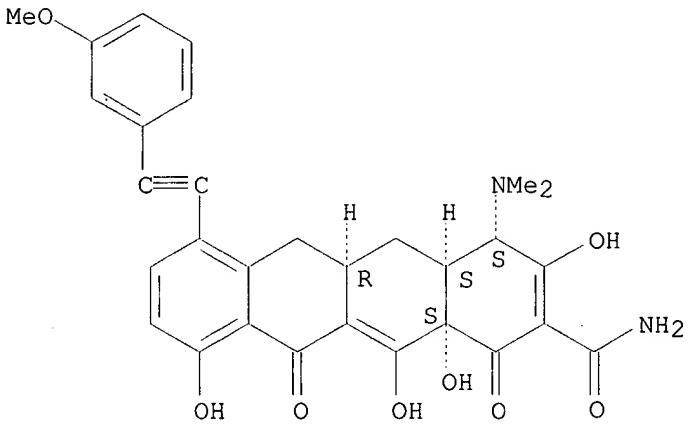
389624-61-7P 389624-62-8P 389624-63-9P
389624-64-0P 389624-65-1P 389624-66-2P
389624-67-3P 389624-68-4P 389624-70-8P
389624-71-9P 389624-72-0P 389624-73-1P
389624-74-2P 389624-75-3P 389624-76-4P
389624-77-5P 389624-78-6P 389624-79-7P
389624-80-0P 389624-83-3P 389624-84-4P
389624-85-5P 389624-86-6P 389624-87-7P
389624-88-8P 389624-89-9P 389624-95-7P
389624-96-8P
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT **389624-36-6P**
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

RN 389624-36-6 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-[(3-methoxyphenyl)ethynyl]-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L15 ANSWER 2 OF 3 USPATFULL

AN 2002:337989 USPATFULL

TI 7, 9-substituted tetracycline compounds

IN Nelson, Mark L., Wellesley, MA, UNITED STATES
Frechette, Roger, Reading, MA, UNITED STATES
Viski, Peter, Brookline, MA, UNITED STATES
Ismail, Mohamed, Bedford, MA, UNITED STATES
Bowser, Todd, Charlton, MA, UNITED STATES
McIntyre, Laura, Arlington, MA, UNITED STATES
Bhatia, Beena, Arlington, MA, UNITED STATES
Hawkins, Paul, Cambridge, MA, UNITED STATES
Reddy, Laxma, Lexington, MA, UNITED STATES
Stapleton, Karen, Weymouth, MA, UNITED STATES
Warchol, Tad, Acton, MA, UNITED STATES
Sheahan, Paul, Hopkinton, MA, UNITED STATES

PI US 2002193354 A1 20021219

AI US 2001-895797 A1 20010629 (9)

PRAI US 2001-275620P 20010313 (60)

DT Utility

FS APPLICATION

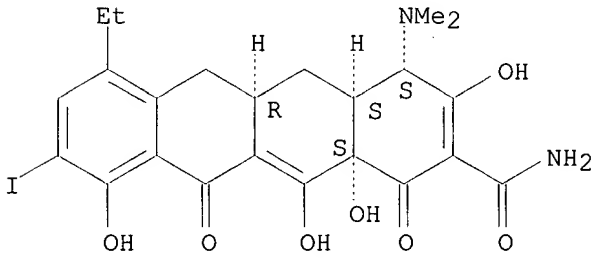
LREP Elizabeth A. Hanley, Esq., Lahive & Cockfield, LLP, 28 State Street, Boston, MA, 02109

CLMN Number of Claims: 61

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1511
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention pertains to novel 7,9-substituted tetracycline compounds. These tetracycline compounds can be used to treat numerous tetracycline compound-responsive states, such as bacterial infections and neoplasms, as well as other known applications for minocycline and tetracycline compounds in general, such as blocking tetracycline efflux and modulation of gene expression.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **459810-04-9P**
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT **459809-43-9P 459809-46-2P 459809-47-3P**
459809-48-4P 459809-51-9P 459809-54-2P
459809-56-4P 459809-58-6P 459809-61-1P
459809-63-3P 459809-65-5P 459809-67-7P
459809-70-2P 459809-72-4P 459809-81-5P
459809-86-0P 459809-92-8P 459809-94-0P
459809-99-5P 459810-03-8P 459810-05-0P
459810-06-1P 459810-09-4P
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT **263761-05-3P**, 7-Ethynylsancycline **389624-14-0P**,
7-Ethylsancycline **459810-10-7P**
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT **459810-04-9P**
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
RN 459810-04-9 USPATFULL
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-9-iodo-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

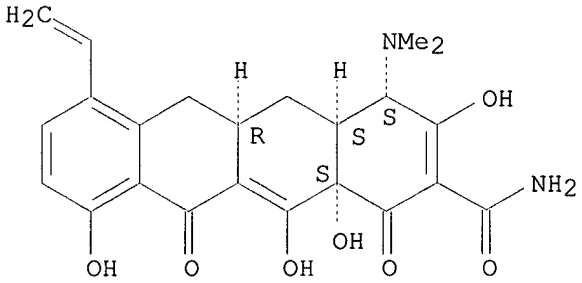


L15 ANSWER 3 OF 3 USPATFULL
AN 2002:206638 USPATFULL
TI 7,8 and 9-substituted tetracycline compounds
IN Nelson, Mark L., Wellesley, MA, UNITED STATES
Koza, Darrell, Westerly, RI, UNITED STATES
PI US 2002111335 A1 20020815
AI US 2001-894805 A1 20010629 (9)
PRAI WO 2000-US21366 20000804
US 2000-216656P 20000707 (60)
DT Utility
FS APPLICATION
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1042
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB 7, 8 and 9-substituted tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7, 8 and 9-substituted tetracycline compounds are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **263761-03-1P 389570-50-7P 389570-53-0P**
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)
IT **263761-03-1P**
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)
RN 263761-03-1 USPATFULL
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> fil hcaplus
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FILE COVERS 1907 - 29 Apr 2003 VOL 138 ISS 18
FILE LAST UPDATED: 28 Apr 2003 (20030428/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all fhitstr tot l12

L12 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2003:57866 HCAPLUS
DN 138:117673
TI Tetracycline compounds having target therapeutic activities
IN Levy, Stuart B.; Draper, Michael; **Nelson, Mark L.**; Jones, Graham
PA Paratek Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 158 pp.
CODEN: PIXXD2
DT Patent
LA English
ICI A61
CC 1-12 (Pharmacology)
Section cross-reference(s): 26
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003005971	A2	20030123	WO 2002-US22451	20020715

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-305546P P 20010713
OS MARPAT 138:117673
AB Methods and compds. for treating a variety of diseases with tetracycline compds. having a target therapeutic activity are described, as is compd. prepn.
ST tetracycline compd prepn therapeutic
IT Brain, disease
Prion diseases
(Creutzfeldt-Jakob; tetracycline compds. with target therapeutic activities)
IT Nervous system
(GABAergic, GABAergic therapy; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Brain, disease
(Gilles de la Tourette syndrome; tetracycline compds. with target therapeutic activities)
IT Nervous system
(Huntington's chorea; tetracycline compds. with target therapeutic activities)
IT Wernicke-Korsakoff syndrome
(Korsakoff's psychosis; tetracycline compds. with target therapeutic activities)
IT Amnesia
(Korsakoff's; tetracycline compds. with target therapeutic activities)
IT Glutamate antagonists
(NMDA antagonists; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Inflammation
Respiratory distress syndrome
(acute; tetracycline compds. with target therapeutic activities)
IT Respiratory distress syndrome
(adult; tetracycline compds. with target therapeutic activities)
IT Nervous system
(amyotrophic lateral sclerosis; tetracycline compds. with target therapeutic activities)

IT Artery, disease
(aneurism; tetracycline compds. with target therapeutic activities)
IT Antiarteriosclerotics
(antiatherosclerotics; tetracycline compds. with target therapeutic activities)
IT Artery, disease
(aorta, aneurism; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(attention deficit disorder; tetracycline compds. with target therapeutic activities)
IT Glycosylation
(biol., protein; tetracycline compds. with target therapeutic activities)
IT Bone, disease
(bone mass disorder; tetracycline compds. with target therapeutic activities)
IT Bronchi
(bronchiectasis; tetracycline compds. with target therapeutic activities)
IT Bronchi, disease
(bronchitis; tetracycline compds. with target therapeutic activities)
IT Ion channel blockers
(calcium; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Musculoskeletal diseases
(cartilage, degrdn.; tetracycline compds. with target therapeutic activities)
IT Lung, disease
(chronic obstructive; tetracycline compds. with target therapeutic activities)
IT Inflammation
Lung, disease
(chronic; tetracycline compds. with target therapeutic activities)
IT Animal cell
(compds. increasing energy available to cells; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Eye, disease
(cornea, ulcer; tetracycline compds. with target therapeutic activities)
IT Antiulcer agents
(corneal ulceration; tetracycline compds. with target therapeutic activities)
IT Bone, disease
(degrdn.; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(dementia, Alzheimer's disease-related; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(depression, major; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(depression, neurotic; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(depression; tetracycline compds. with target therapeutic activities)
IT Disease, animal
(diabetic complications; tetracycline compds. with target therapeutic activities)
IT Ulcer
(diabetic; tetracycline compds. with target therapeutic activities)
IT Cartilage
(disease, degrdn.; tetracycline compds. with target therapeutic

activities)
IT Nervous system
(disease; tetracycline compds. with target therapeutic activities)
IT Learning
Sleep
(disorder; tetracycline compds. with target therapeutic activities)
IT Eye, disease
(dry; tetracycline compds. with target therapeutic activities)
IT Drugs
(gastrointestinal; tetracycline compds. with target therapeutic activities)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(glycosylation; tetracycline compds. with target therapeutic activities)
IT Disease, animal
(inflammation process-assocd. state; tetracycline compds. with target therapeutic activities)
IT Lung, disease
(injury, acute; tetracycline compds. with target therapeutic activities)
IT Brain, disease
Nerve, disease
(injury; tetracycline compds. with target therapeutic activities)
IT Diabetes mellitus
(insulin-dependent; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(mania; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(manic bipolar disorder; tetracycline compds. with target therapeutic activities)
IT Neoplasm
(metastasis; tetracycline compds. with target therapeutic activities)
IT Headache
(migraine; tetracycline compds. with target therapeutic activities)
IT Nerve, disease
(motor; tetracycline compds. with target therapeutic activities)
IT Nerve
(neuron, neuronal membrane stabilizers; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Membrane, biological
(neuronal membrane stabilizers; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Cytoprotective agents
(neuroprotectants; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Mental disorder
(obsession-compulsion; tetracycline compds. with target therapeutic activities)
IT Bone, neoplasm
(osteosarcoma; tetracycline compds. with target therapeutic activities)
IT Anxiety
(panic disorder; tetracycline compds. with target therapeutic activities)
IT Periodontium
(periodontitis; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(phobia; tetracycline compds. with target therapeutic activities)
IT Fatty acids, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., n-3; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein buildup removal agents; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Paralysis
(pseudobulbar; tetracycline compds. with target therapeutic activities)
IT Transcription, genetic
(regulators; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Artery, disease
(restenosis; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(schizoaffective disorder; tetracycline compds. with target therapeutic activities)
IT Mental disorder
(senile psychosis; tetracycline compds. with target therapeutic activities)
IT Respiratory tract
(sinusitis; tetracycline compds. with target therapeutic activities)
IT Ion channel blockers
(sodium; tetracycline compds. with target therapeutic activities, and use with other agents)
IT Brain, disease
(stroke; tetracycline compds. with target therapeutic activities)
IT Aging, animal
Alzheimer's disease
Amnesia
Aneurysm
Angiogenesis
Angiogenesis inhibitors
Anti-Alzheimer's agents
Anti-inflammatory agents
Anti-ischemic agents
Antiarteriosclerotics
Antiarthritics
Antiasthmatics
Antibacterial agents
Anticonvulsants
Antidepressants
Antidiabetic agents
Antihypertensives
Antimalarials
Antimigraine agents
Antipsychotics
Antirheumatic agents
Antitumor agents
Antiviral agents
Anxiety
Anxiolytics
Arteriosclerosis
Asthma
Atherosclerosis
Autoimmune disease
Carcinoma
Cardiovascular agents
Cognition enhancers
Cystic fibrosis
Diabetes mellitus
Drug delivery systems
Emphysema
Epilepsy

Escherichia coli
Eye, disease
Fungicides
Hepatitis
Human
Hypertension
Inflammation
Ischemia
Lung, disease
Macrophage
Malaria
Mental disorder
Multiple sclerosis
Neoplasm
Nervous system agents
Osteoarthritis
Osteomyelitis
Osteoporosis
Parasiticides
Psychotropics
Rheumatoid arthritis
Sarcoma
Schizophrenia
Skin, disease
Staphylococcus aureus
Wound healing promoters
(tetracycline compds. with target therapeutic activities)

IT Tetracyclines
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT Anti-infective agents
Antioxidants
Chemotherapy
Ginkgo biloba
Opioid antagonists
Radiotherapy
(tetracycline compds. with target therapeutic activities, and use with other agents)

IT Glucocorticoids
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities, and use with other agents)

IT Wound
(tissue; tetracycline compds. with target therapeutic activities)

IT Brain, disease
Spinal cord
(trauma; tetracycline compds. with target therapeutic activities)

IT Intestine, disease
(ulcerative colitis; tetracycline compds. with target therapeutic activities)

IT Blood vessel, disease
(vascular stroke; tetracycline compds. with target therapeutic activities)

IT Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha., antagonists; tetracycline compds. with target therapeutic activities, and use with other agents)

IT 141907-41-7, Matrix metalloproteinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MMP-4 and MMP5, inflammatory process-assocd. state assocd. with; tetracycline compds. with target therapeutic activities)

IT 10102-43-9, Nitric oxide, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NO-assocd. state; tetracycline compds. with target therapeutic activities)

IT 56-86-0, L-Glutamic acid, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(anti-glutamate therapy; tetracycline compds. with target therapeutic activities, and use with other agents)

IT 9001-12-1, Matrix metalloproteinase 1 9004-06-2, Matrix metalloproteinase 12 79955-99-0, Matrix metalloproteinase 3 140610-48-6, Matrix metalloproteinase 10 141256-52-2, Matrix metalloproteinase 7 145267-01-2, Matrix metalloproteinase 11 146480-35-5, Matrix metalloproteinase 2 146480-36-6, Matrix metalloproteinase 9 161384-17-4, Matrix metalloproteinase 14 172308-17-7, Matrix metalloproteinase 15 175449-82-8, Matrix metalloproteinase 13 182970-56-5, Matrix metalloproteinase 16 185766-51-2, Matrix metalloproteinase 20 188364-80-9, Matrix metalloproteinase 19 203810-08-6, Matrix metalloproteinase 17 252351-86-3, Matrix metalloproteinase 6
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inflammatory process-assocd. state assocd. with; tetracycline compds. with target therapeutic activities)

IT 9001-08-5, Cholinesterase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; tetracycline compds. with target therapeutic activities, and use with other agents)

IT **389624-49-1P** 488820-35-5P 488820-36-6P 488820-38-8P 488820-39-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT 60-54-8 60-54-8D, Tetracycline, derivs. 127-33-3 564-25-0 914-00-1 2444-65-7 3242-03-3 4497-07-8 5874-95-3 5995-55-1 10118-89-5 16145-05-4 24290-70-8 31642-30-5 35689-63-5 35689-65-7 53108-41-1 53173-80-1 59046-79-6 77901-56-5 115207-75-5 120793-45-5 146253-71-6 146253-75-0 146278-01-5 146278-02-6 146278-03-7 149934-16-7 149934-19-0 151922-17-7 153621-68-2 161320-33-8 161321-34-2 161452-36-4 186759-47-7 186759-49-9 186759-51-3 186759-53-5 186759-55-7 186759-61-5 220620-09-7 233585-94-9 233585-95-0 233585-96-1 233585-97-2 233586-02-2 233586-03-3 233586-04-4 233586-06-6 233586-07-7 233586-08-8 233586-09-9 233586-10-2 233586-11-3 233586-12-4 233586-16-8 263760-96-9 263760-98-1 263761-01-9 263761-02-0 263761-08-6 295356-11-5 295356-12-6 295356-13-7 295356-16-0 295356-17-1 330627-21-9 330627-22-0 330627-23-1 330627-24-2 330627-26-4 330627-27-5 330627-32-2 344771-54-6 351336-92-0 351336-94-2 365276-98-8 365276-99-9 365277-00-5 365277-01-6 365277-02-7 365277-03-8 365277-04-9 365277-05-0 365277-06-1 365277-08-3 365277-11-8 365277-12-9 365277-13-0 365277-14-1 365277-16-3 365277-19-6 365277-20-9 365277-21-0 365277-22-1 365277-23-2 365277-24-3 365277-26-5 365277-28-7 365277-29-8 365277-34-5 365277-35-6 365277-36-7 365277-37-8 365277-38-9 365277-39-0 365277-40-3 365277-41-4 365277-42-5 365277-43-6 365277-44-7 365277-45-8 365277-46-9 365277-47-0 365277-48-1 365277-49-2 365277-50-5 365277-51-6 365277-52-7 365277-53-8 365277-54-9 365277-55-0 365277-56-1 365277-57-2 365277-58-3 365277-59-4 365277-60-7 365277-61-8 365277-62-9 365277-63-0 365277-64-1 365277-65-2 365277-66-3 365277-88-9 374748-06-8 380435-62-1 380435-63-2 380435-65-4 380435-76-7 380435-88-1 389081-55-4 389081-56-5 389081-58-7 389081-60-1 389081-61-2 389081-62-3 389081-63-4 389081-64-5 389081-65-6 389081-66-7 389081-67-8 389081-68-9 389081-69-0 389081-71-4 389081-72-5 389081-73-6

389081-74-7 389081-75-8 389081-76-9 389081-77-0 389081-78-1
389081-79-2 389081-80-5 389081-85-0 389139-10-0 389139-12-2
389139-15-5 389139-16-6 389139-17-7 389139-18-8 389139-19-9
389139-20-2 389139-21-3 389139-22-4 389139-23-5 389139-24-6
389139-25-7 389139-26-8 389139-27-9 389139-28-0 389139-29-1
389139-31-5 389139-32-6 389139-33-7 389139-34-8 389139-35-9
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389139-41-7 389139-42-8 389139-43-9 389139-44-0 389139-45-1
389139-46-2 389139-47-3 389139-48-4 389139-49-5 389139-51-9
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389139-57-5 389139-58-6 389139-59-7 389139-60-0 389139-61-1
389139-62-2 389139-63-3 389139-64-4 389139-65-5 389139-66-6
389139-67-7 389139-68-8 389139-69-9 389139-70-2 389139-71-3
389139-72-4 389139-73-5 389139-74-6 389139-75-7 389139-78-0
389139-79-1 389139-80-4 389139-81-5 389139-82-6 389139-83-7
389139-85-9 389139-86-0 389139-87-1 389139-88-2 389139-89-3
389139-90-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT 389139-91-7 389139-92-8 389139-93-9 389139-94-0 389139-95-1
389139-96-2 389139-97-3 389139-98-4 389139-99-5 389140-00-5
389140-01-6 389140-02-7 389140-03-8 389140-04-9 389140-06-1
389570-43-8 389570-46-1 389570-49-4 **389570-50-7**
389570-51-8 389570-52-9 **389570-53-0** 389570-54-1
389623-72-7 389623-77-2 389623-80-7 389623-82-9 **389623-86-3**
389623-88-5 **389623-89-6 389623-91-0** 389623-93-2
389623-95-4 389623-96-5 389623-97-6 **389623-98-7**
389623-99-8 389624-01-5 389624-02-6
389624-03-7 389624-04-8 389624-05-9 **389624-08-2**
389624-09-3 389624-12-8 389624-13-9 **389624-14-0**
389624-15-1 389624-18-4 389624-20-8
389624-21-9 389624-22-0 389624-23-1 389624-24-2 **389624-26-4**
389624-27-5 389624-28-6 389624-29-7 **389624-30-0**
389624-31-1 389624-32-2 389624-33-3
389624-34-4 **389624-35-5 389624-36-6**
389624-37-7 389624-38-8 389624-39-9
389624-40-2 389624-41-3 389624-43-5
389624-44-6 389624-45-7 **389624-46-8**
389624-51-5 389624-52-6 389624-54-8 389624-55-9
389624-56-0 389624-57-1 389624-59-3 **389624-62-8**
389624-63-9 389624-66-2 389624-67-3
389624-68-4 389624-69-5 **389624-70-8**
389624-71-9 389624-72-0 389624-73-1
389624-75-3 389624-76-4 389624-77-5
389624-78-6 389624-79-7 389624-80-0
389624-81-1 389624-82-2 **389624-83-3 389624-84-4**
389624-85-5 389624-86-6 389624-87-7
389624-88-8 389624-89-9 389624-90-2 389624-91-3
389624-92-4 389624-93-5 389624-94-6 **389624-95-7**
389624-97-9 389624-98-0 389624-99-1 389625-00-7 389625-01-8
389625-02-9 389625-03-0 389625-04-1 389625-05-2 389625-06-3
389625-07-4 389625-07-4 389625-09-6 389625-09-6 389625-10-9
389625-11-0 389625-12-1 439217-57-9 439217-59-1 459425-79-7
459425-80-0 459425-96-8 459426-11-0 459809-42-8 **459809-43-9**
459809-44-0 459809-45-1 **459809-46-2 459809-47-3**
459809-48-4 459809-49-5 459809-50-8 **459809-51-9**
459809-52-0 459809-53-1 **459809-54-2** 459809-55-3
459809-56-4 459809-57-5 **459809-58-6** 459809-59-7
459809-61-1 459809-63-3 459809-65-5
459809-66-6 **459809-67-7** 459809-68-8 **459809-70-2**
459809-72-4 459809-74-6 459809-76-8 459809-77-9
459809-79-1 **459809-81-5** 459809-82-6 **459809-86-0**

459809-88-2 459809-91-7 **459809-92-8** 459809-93-9
459809-94-0 459809-95-1 459809-96-2 459809-97-3
459809-98-4 459810-00-5 459810-01-6 459810-02-7 **459810-03-8**
459810-04-9 **459810-06-1** 459810-07-2
459810-09-4 460068-26-2 460068-27-3 460068-29-5
460068-30-8 460068-31-9 460068-33-1 460068-34-2 460068-35-3
460068-36-4 460068-38-6 460068-39-7 460068-40-0 460068-41-1
460068-43-3 460068-44-4 460068-45-5 460068-46-6 460068-47-7
460068-48-8 460068-49-9 460068-50-2 460068-51-3 460068-52-4
460068-53-5 460068-54-6 460068-55-7 460068-57-9 460068-58-0
460068-59-1 460068-60-4 460068-63-7 460068-64-8 460068-65-9
460068-66-0 460068-67-1 460068-68-2 460068-69-3 460068-70-6
460068-71-7 460068-72-8 460068-73-9 460068-74-0 460068-75-1
460068-76-2 460068-77-3 460068-78-4 460068-79-5 460068-80-8
460068-81-9 460068-82-0 460068-83-1 **460068-84-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)
IT 460068-85-3 460068-86-4 460068-87-5 460068-88-6 460068-90-0
460068-92-2 460068-93-3 460068-94-4 460068-95-5 460068-96-6
460068-97-7 460068-99-9 460069-34-5 460069-38-9 460069-65-2
460069-70-9 **460069-89-0** 460069-96-9 460070-02-4
460070-03-5 460070-53-5 460070-61-5 460070-66-0 460070-73-9
460070-76-2 460070-79-5 **460070-92-2** 460070-95-5
460071-02-7 460071-04-9 460071-06-1 460071-09-4 460071-12-9
460071-14-1 460071-17-4 460071-19-6 460071-29-8 460071-31-2
460071-33-4 460071-37-8 460071-66-3 460071-69-6 460071-80-1
460071-83-4 460071-83-4 460071-87-8 460071-89-0 460071-91-4
460071-93-6 460071-97-0 460071-99-2 460072-01-9 460072-03-1
460072-05-3 460072-07-5 460072-09-7 460072-10-0 460072-12-2
460072-15-5 460072-17-7 460072-19-9 460072-21-3 460072-25-7
460072-28-0 460072-29-1 460072-30-4 460072-31-5 460072-33-7
460072-36-0 460072-38-2 460072-40-6 460072-43-9 460072-45-1
460072-47-3 460072-49-5 460072-61-1 460072-63-3 460072-65-5
460072-70-2 460072-73-5 460072-75-7 460072-78-0 460072-82-6
460072-86-0 460072-89-3 460072-91-7 460072-93-9 460072-99-5
460073-01-2 460073-03-4 460073-05-6 460073-07-8 460073-09-0
460073-11-4 460073-15-8 460073-17-0 460073-21-6 460073-22-7
460073-23-8 460073-25-0 460073-27-2 **460073-29-4**
460073-31-8 460073-33-0 460073-35-2 460073-37-4
460073-40-9 460073-41-0 460073-43-2 460073-45-4 460073-47-6
460073-49-8 460073-51-2 460073-55-6 460073-58-9 460073-60-3
460073-62-5 460073-64-7 **460073-68-1** 460073-70-5
460073-72-7 460073-74-9 460073-76-1 460073-78-3 460073-80-7
460073-82-9 460073-84-1 460073-86-3 460073-88-5 460073-90-9
460073-92-1 460073-94-3 460073-96-5 460074-00-4 460074-02-6
460074-04-8 460074-06-0 460074-09-3 460074-11-7 460074-13-9
460074-17-3 460074-19-5 460074-21-9 460074-23-1 460074-26-4
460074-28-6 460074-30-0 460074-32-2 460074-34-4 460074-36-6
460074-38-8 460074-40-2 460074-42-4 460074-44-6 460074-46-8
460074-48-0 460074-50-4 460074-52-6 460074-54-8 460074-56-0
460074-58-2 460074-60-6 460074-62-8 460074-64-0 460074-66-2
460074-68-4 460074-69-5 460074-71-9 460074-73-1 460074-75-3
460074-77-5 460074-79-7 460074-81-1 460074-85-5 460074-87-7
460074-89-9 460074-91-3 460074-93-5 460074-95-7 460074-97-9
460074-99-1 460075-04-1 460075-06-3 460075-08-5 460075-12-1
460075-14-3 460075-62-1 460076-23-7 460082-87-5 460082-89-7
460082-90-0 473973-13-6 473973-20-5 473973-34-1 473973-37-4
473973-41-0 473973-62-5 473973-64-7 473973-86-3 473973-96-5 473974-12-8 473974-75-3 473974-76-4 473974-77-5 473974-79-7
473974-80-0 473974-81-1 473974-82-2 473974-83-3 473974-84-4
473974-85-5 **488815-44-7** **488815-45-8**
488815-46-9 **488815-47-0** **488815-48-1**

488815-49-2 488815-52-7 488815-53-8 488815-54-9
488815-55-0 488815-56-1 488815-57-2 488815-58-3 **488815-59-4**
488815-60-7 488815-61-8 488815-62-9 488815-63-0
488815-64-1 488815-65-2 488815-66-3 488815-67-4 488815-68-5
488815-69-6 488815-70-9 488815-71-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT 488815-72-1 488815-73-2 488815-74-3 488815-75-4 488815-76-5
488815-77-6 488815-78-7 488815-79-8 488815-80-1 488815-82-3
488815-89-0 488815-93-6 488815-98-1 488816-00-8 488816-09-7
488816-13-3 488816-16-6 488816-18-8 488816-19-9 488816-26-8
488816-37-1 488816-39-3 488816-42-8 488816-54-2 488816-55-3
488816-58-6 488816-59-7 488816-64-4 488816-65-5 488816-70-2
488816-71-3 488816-73-5 488816-75-7 488816-82-6 488816-86-0
488816-88-2 488816-92-8 **488816-93-9** 488816-98-4
488817-01-2 488817-06-7 488817-11-4 488817-13-6 488817-14-7
488817-15-8 488817-16-9 488817-17-0 488817-18-1 488817-19-2
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488817-29-4 488817-30-7 488817-31-8 488817-32-9 488817-33-0
488817-34-1 488817-35-2 488817-36-3 488817-37-4 488817-38-5
488817-39-6 488817-40-9 488817-41-0 488817-42-1 488817-43-2
488817-44-3 488817-45-4 488817-46-5 488817-47-6 488817-48-7
488817-49-8 488817-50-1 **488817-51-2** **488817-52-3**
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488817-57-8 488817-58-9 **488817-59-0** **488817-60-3**
488817-61-4 **488817-62-5** **488817-63-6** 488817-64-7
488817-65-8 **488817-66-9** **488817-67-0**
488817-68-1 **488817-69-2** **488817-70-5**
488817-71-6 **488817-72-7** 488817-73-8 488817-74-9
488817-75-0 488817-76-1 488817-77-2 488817-78-3
488817-79-4 **488817-80-7** 488817-81-8 488817-82-9
488817-89-6 488817-91-0 488817-92-1 488817-93-2 **488817-94-3**
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488818-00-4 488818-01-5 488818-02-6 488818-03-7 488818-04-8
488818-05-9 488818-06-0 488818-07-1 488818-08-2 488818-09-3
488818-10-6 488818-11-7 **488818-12-8** 488818-13-9
488818-14-0 488818-15-1 488818-16-2 488818-17-3
488818-18-4 488818-19-5 488818-20-8 488818-21-9 488818-22-0
488818-23-1 488818-24-2 **488818-25-3** 488818-26-4
488818-27-5 **488818-28-6** 488818-29-7 **488818-30-0**
488818-31-1 488818-32-2 488818-33-3 488818-34-4 488818-35-5
488818-36-6 488818-37-7 488818-38-8 488818-39-9 488818-40-2
488818-41-3 488818-42-4 488818-43-5 488818-44-6 488818-45-7
488818-46-8 488818-47-9 488818-48-0 488818-49-1 488818-50-4
488818-51-5 488818-52-6 488818-53-7 488818-54-8 488818-55-9
488818-56-0 488818-57-1 488818-58-2 488818-59-3 488818-60-6
488818-61-7 488818-63-9 488818-64-0 488818-65-1 488818-66-2
488818-67-3 488818-68-4 **488818-69-5** 488818-70-8
488818-71-9 488818-72-0 488818-73-1 488818-74-2 488818-75-3
488818-76-4 488818-77-5 488818-78-6 488818-79-7 488818-80-0
488818-81-1 488818-82-2 488818-83-3 488818-84-4
488818-85-5 488818-86-6 488818-87-7 488818-88-8 488818-89-9
488818-90-2 488818-91-3 488818-92-4 488818-93-5 488818-94-6
488818-95-7 488818-96-8 488818-97-9 488818-98-0 488818-99-1
488819-00-7 488819-01-8 488819-02-9 488819-03-0 488819-04-1
488819-05-2 488819-06-3 488819-07-4 488819-08-5 **488819-14-3**
488819-15-4 488819-16-5 488819-17-6 488819-18-7 488819-19-8
488819-20-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT 488819-21-2 488819-22-3 488819-23-4 488819-24-5 488819-25-6
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488819-36-9 488819-37-0 488819-38-1 488819-39-2 488819-40-5
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488819-76-7 488819-77-8 488819-78-9 488819-79-0 488819-80-3
488819-81-4 488819-82-5 488819-83-6 488819-84-7 488819-85-8
488819-86-9 488819-87-0 488819-88-1 **488819-89-2**
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488820-34-4 488820-42-4 **488820-43-5** 488820-45-7
488820-46-8 488820-47-9 488820-48-0 488820-49-1
488820-50-4 488821-84-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities)

IT 74-99-7, Propyne 100-39-0, Benzyl bromide 103-55-9 111-30-8, Glutaraldehyde 122-78-1, Phenylacetaldehyde 622-77-5, Benzylcyanamide 808-26-4, Sancycline 871-84-1, 1,7-Octadiyne 5371-49-3 13614-98-7, Minocycline hydrochloride 25154-38-5, Piperazineethanol 25267-27-0, Iodobutane 50696-61-2, Cyclohexenylacetylene 55552-70-0, 3-Furanyl boronic acid 107099-99-0, 2,5-Dimethoxyphenyl boronic acid 128796-39-4, 4-Trifluoromethylphenyl boronic acid 144025-03-6, 2,4-Difluorophenyl boronic acid 149104-90-5, 4-Acetylphenylboronic acid 389625-14-3 460076-35-1 460076-38-4 488820-37-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(tetracycline compds. with target therapeutic activities)

IT 113164-67-3P, 7-Iodosancycline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tetracycline compds. with target therapeutic activities)

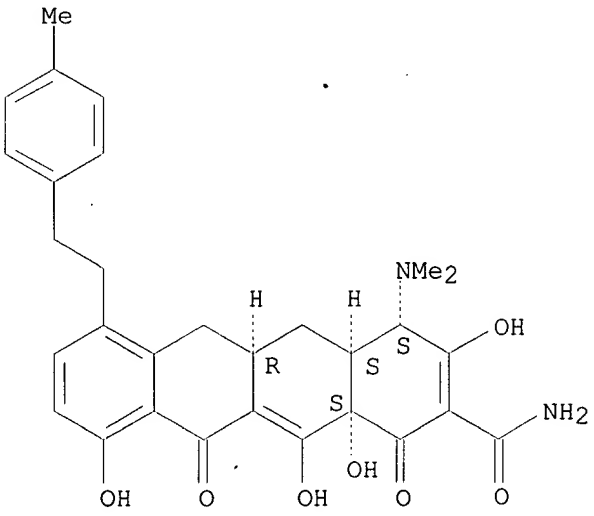
IT 50-81-7, Vitamin C, biological studies 53-03-2, Prednisone 302-79-4, Retinoic acid 303-98-0, Coenzyme Q10 987-78-0, CDP-choline 1134-47-0, Baclofen 1406-18-4, Vitamin E 1744-22-5, Riluzole 2763-96-4, Muscimol 7782-49-2, Selenium, biological studies 10118-90-8, Minocycline 11096-26-7, Erythropoietin 11103-57-4, Vitamin A 14611-51-9, Selegiline 57828-26-9, Lipoic acid 60142-96-3, Gabapentin 84057-84-1, Lamotrigine 112924-45-5, Dexanabinol 128298-28-2, Remacemide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetracycline compds. with target therapeutic activities, and use with other agents)

IT **389624-49-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tetracycline compds. with target therapeutic activities)

RN 389624-49-1 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-[2-(4-methylphenyl)ethyl]-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:832571 HCAPLUS
DN 137:333118
TI Substituted tetracycline compounds for the treatment of malaria
IN Draper, Michael; **Nelson, Mark L.**; **Frechette, Roger**
PA Paratek Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 1-5 (Pharmacology)
Section cross-reference(s): 25, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002085303	A2	20021031	WO 2002-US12935	20020424

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-286193P P 20010424
OS MARPAT 137:333118
AB The invention provides a method for treating or preventing malaria in a subject. The method includes administering to the subject an effective amt. of a substituted tetracycline compd., such that malaria is treated or prevented. In one aspect, the invention provides pharmaceutical compns. which include an effective amt. of a tetracycline compd. to treat malaria in a subject and a pharmaceutically acceptable carrier. The substituted tetracycline compds. of the invention can be used in combination with one or more antimalarial compds. or can be used to treat or prevent malaria

which is resistant to one or more other antimalarial compds. Compd. prepn. is described.

ST tetracycline deriv prepn antimalarial; malaria treatment tetracycline deriv

IT Antimalarials
Drug resistance
Malaria
Plasmodium falciparum
Plasmodium malariae
Plasmodium ovale
Plasmodium vivax
(Substituted tetracycline compds. for the treatment of malaria)

IT Sulfonamides
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Substituted tetracycline compds. for the treatment of malaria)

IT Headache
(and malaise, supplementary compd. for treatment of; Substituted tetracycline compds. for the treatment of malaria)

IT Antimicrobial agents
(antimicrobial Gram-pos. activity; Substituted tetracycline compds. for the treatment of malaria)

IT Drug delivery systems
(prodrugs; Substituted tetracycline compds. for the treatment of malaria)

IT Spleen, disease
(splenomegaly, supplementary compd. for treatment of; Substituted tetracycline compds. for the treatment of malaria)

IT Anemia (disease)
Fever and Hyperthermia
(supplementary compd. for treatment of; Substituted tetracycline compds. for the treatment of malaria)

IT Antipyretics
(supplementary compd.; Substituted tetracycline compds. for the treatment of malaria)

IT Drug delivery systems
(tetracycline derivs. for malaria treatment)

IT 58-14-0, Pyrimethamine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Substituted tetracycline compds. for the treatment of malaria)

IT 54-05-7, Chloroquine 56-54-2, Quinidine 86-42-0, Amodiaquine 90-34-6, Primaquine 130-95-0, Quinine 500-92-5, Proguanil 537-21-3, Chlorproguanil 550-81-2, Amopyroquine 738-70-5, Trimethoprim 37338-39-9 37357-69-0 53230-10-7, Mefloquine 63968-64-9, Artemisinin 69756-53-2, Halofantrine 71963-77-4, Artemether 74847-35-1, Pyronaridine 82186-77-4, Lumefantrine 88495-63-0, Artesunate 95233-18-4, Atovaquone 123407-36-3, Arteflene
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Substituted tetracycline compds. for the treatment of malaria)

IT 389139-31-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Substituted tetracycline compds. for the treatment of malaria)

IT 60-54-8 60-54-8D, Tetracycline, derivs. 79-57-2 127-33-3 564-25-0 808-26-4 914-00-1 10118-90-8 31642-30-5 35689-65-7 146253-75-0 146278-03-7 151922-17-7 186759-47-7 186759-51-3 186759-53-5 201849-42-5 233585-95-0 233586-04-4 233586-06-6 233586-09-9 263760-98-1 263761-02-0 263761-08-6 330627-24-2 344771-54-6 351336-94-2 365277-01-6 365277-22-1 365277-23-2 365277-28-7 365277-29-8 365277-38-9 365277-45-8 365277-47-0 365277-51-6 365277-55-0 365277-56-1 365277-57-2 365277-59-4 365277-60-7 365277-63-0 365277-66-3 374748-06-8 380435-62-1 380435-63-2

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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Substituted tetracycline compds. for the treatment of malaria)

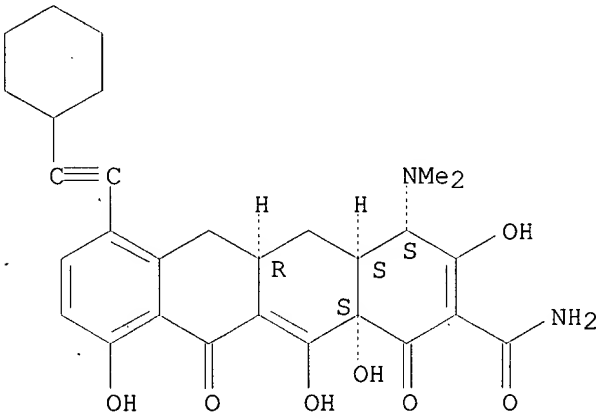
IT 473974-12-8 473974-75-3 473974-76-4 473974-77-5 473974-79-7
473974-80-0 473974-81-1 473974-82-2 473974-83-3 473974-84-4
473974-85-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Substituted tetracycline compds. for the treatment of malaria)

IT 263760-96-9P, 7-Phenylsancycline 263760-99-2P 389140-02-7P
389623-67-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tetracycline derivs. for malaria treatment)

IT 98-80-6, Phenylboronic acid 1679-18-1, 4-Chlorophenylboronic acid
1765-93-1, 4-Fluorophenylboronic acid 14047-29-1, p-Carboxyphenylboronic acid 35037-73-1, 4-Trifluoromethoxyphenylisocyanate 59046-78-5

263761-01-9 389140-05-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(tetracycline derivs. for malaria treatment)
IT 113164-67-3P, 7-Iodosancycline 389140-04-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tetracycline derivs. for malaria treatment)
IT **389623-89-6**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Substituted tetracycline compds. for the treatment of malaria)
RN 389623-89-6 HCAPLUS
CN 2-Naphthacenecarboxamide, 7-(cyclohexylethynyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:716234 HCAPLUS
DN 137:247552
TI Preparation of 7, 9-substituted tetracycline derivatives for pharmaceutical use as antibacterial agents
IN **Nelson, Mark L.; Frechette, Roger; Viski, Peter; Ismail, Mohamed; Bowser, Todd; McIntyre, Laura; Bhatia, Beena; Hawkins, Paul;** Reddy, Laxma; Stapleton, Karen; **Warchol, Tad; Sheahan, Paul**
PA Paratek Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C237-26
ICS A61K031-65
CC 26-6 (Biomolecules and Their Synthetic Analogs)
Section cross-reference(s): 1, 10, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002072532	A1	20020919	WO 2001-US20722	20010629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,

RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2002193354 A1 20021219 US 2001-895797 20010629
PRAI US 2001-275620P P 20010313
OS MARPAT 137:247552
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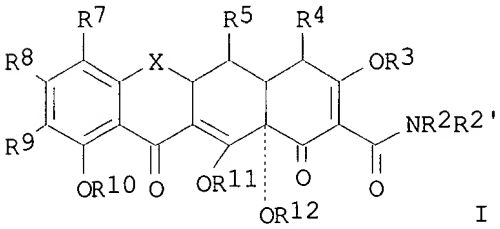

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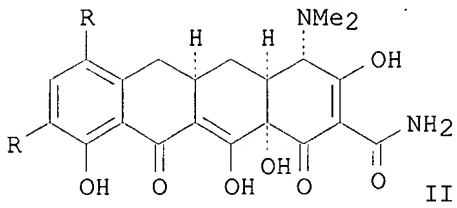


II

AB 7,9-Substituted tetracycline derivs., such as I [X = CHC(R13Y'Y), CR6'R6, S, NR6, O; R2, R2', R4', R4" = H, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroarom., prodrug; R4 = NR4'R4", alkyl, alkenyl, alkynyl, OH, halogen, H; R2', R3, R10, R11, R12 = H, prodrug; R5 = OH, H, thiol, alkanoyl, aroyl, aryl, alkoxy, alkylthio, carbonyloxy; R6, R6' = H, methylene, absent, OH, halogen, thiol, alkyl, alkenyl, alkynyl, alkoxy; R7 = NO2, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, amino, arylalkyl, arylalkenyl, arylalkynyl, aminoalkyl; R8 = H, OH, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl; R9 = NO2, alkyl, alkenyl, alkynyl, aryl, alkoxy; R13 = H, OH, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl; Y, Y' = H, halogen, OH, CN, sulfhydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino], and pharmaceutically acceptable salts thereof, were prepd. to treat numerous tetracycline compd.-responsive states, such as bacterial infections and neoplasms, as well as other known applications for minocycline compds. in general, such as blocking tetracycline efflux and modulation of gene expression. Thus, reaction between N-iodosuccinimide and sancycline hydrochloride hemihydrate yielded 7,9-diiodosancycline II (R = I) which was reacted with 3,4-methylenedioxyphenyl boronic acid to afford 7,9-bis(3,4-methylenedioxyphenyl)-sancycline II (R = 3,4-methylenedioxyphenyl). The prepd. tetracycline derivs. were tested for antibacterial activity against Staphylococcus aureus, Enterococcus hirae and Escherichia coli.

ST tetracycline deriv prepn antibacterial; sancycline deriv prepn antibacterial

IT Infection
(bacterial, treatment; prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

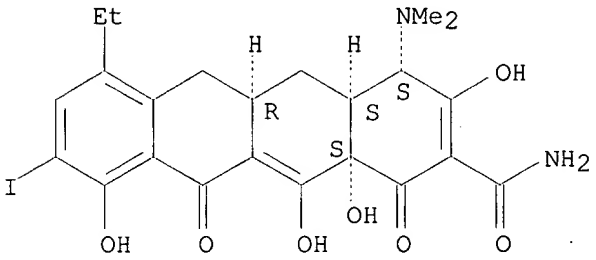
IT Human
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT Tetracyclines
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT Escherichia coli
(prepn. of 7, 9-substituted tetracycline derivs. for treating bacterial infection assocd. with E. coli)
IT Enterococcus faecalis
(prepn. of 7, 9-substituted tetracycline derivs. for treating bacterial infection assocd. with E. faecalis)
IT Enterococcus hirae
(prepn. of 7, 9-substituted tetracycline derivs. for treating bacterial infection assocd. with E. hirae)
IT Staphylococcus aureus
(prepn. of 7, 9-substituted tetracycline derivs. for treating bacterial infection assocd. with S. aureus)
IT **459810-04-9P** 459810-08-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT 330627-26-4P 459809-42-8P **459809-43-9P** 459809-44-0P
459809-45-1P **459809-46-2P 459809-47-3P**
459809-48-4P 459809-49-5P 459809-50-8P **459809-51-9P**
459809-52-0P 459809-53-1P **459809-54-2P** 459809-55-3P
459809-56-4P 459809-57-5P **459809-58-6P** 459809-59-7P
459809-61-1P 459809-63-3P 459809-65-5P
459809-66-6P **459809-67-7P** 459809-68-8P **459809-70-2P**
459809-72-4P 459809-74-6P 459809-76-8P 459809-77-9P
459809-79-1P **459809-81-5P** 459809-82-6P 459809-84-8P
459809-86-0P 459809-88-2P 459809-91-7P **459809-92-8P**
459809-93-9P **459809-94-0P** 459809-95-1P 459809-96-2P
459809-97-3P 459809-98-4P **459809-99-5P** 459810-00-5P
459810-01-6P 459810-02-7P **459810-03-8P 459810-05-0P**
459810-06-1P 459810-07-2P **459810-09-4P** 459810-11-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT 516-12-1, N-Iodosuccinimide 808-26-4, Sancycline 1066-54-2, Trimethylsilyl acetylene 50696-61-2, Cyclohexenyl-acetylene 53173-80-1 94839-07-3, 3,4-Methylenedioxyphenyl boronic acid 389625-14-3 459810-12-9 460091-55-8, Sancycline hydrochloride hemihydrate
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
IT 113164-67-3P, 7-Iodosancycline **263761-05-3P**, 7-Ethynylsancycline 263761-08-6P, 7,9-Diiodosancycline **389624-14-0P**, 7-Ethylsancycline **459810-10-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Ashley, R; WO 0028983 A 2000 HCAPLUS
(2) Farmaceutici Italia; DE 2346535 A 1974 HCAPLUS
(3) Farmaceutici Italia; DE 2527568 A 1976 HCAPLUS
(4) James, H; US 3338963 A 1967 HCAPLUS
(5) Winterbottom, R; US 3433834 A 1969 HCAPLUS
IT **459810-04-9P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of 7, 9-substituted tetracycline derivs. for pharmaceutical use

as antibacterial agents)
RN 459810-04-9 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-9-iodo-1,11-dioxo-, (4S,4aS,5aR,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:716035 HCAPLUS
DN 137:244598
TI Substituted tetracycline compounds as synergistic antifungal agents
IN Draper, Michael; **Nelson, Mark L.**
PA Paratek Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 1, 5, 26
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002072031	A2	20020919	WO 2002-US7829	20020314

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-275899P P 20010314
OS MARPAT 137:244598
AB Methods and compns. for treating for the synergistic treatment of fungal assocd. disorders are discussed. The method includes administering the antifungal agent with an effective amt. of a substituted tetracycline compd., such that the antifungal activity of the antifungal agent is increased. Examples of antifungal agents include polyenes such as amphotericin B.
ST tetracycline synergistic antifungal agent
IT Actinomyces
(actinomycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Aspergillus
(aspergillosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Blastomyces
Mycosis

(blastomycosis, North American; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Blastomyces
Mycosis
(blastomycosis; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Candida albicans
(candidiasis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Drug delivery systems
(carriers; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Skin, disease
(chromoblastomycosis; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Mycosis
(coccidioidomycosis; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Tinea (skin disease)
(cruris; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Cryptococcus neoformans
(cryptococcosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Lymphatic system
(disease, epizootic lymphangitis; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Toxicity
(drug, immunosuppression from, fungal infections in; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Entomophthorales
(entomophthoromycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Histoplasma farciminosum
(epizootic lymphangitis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Immunosuppression
(from chemotherapy, fungal infections in; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT AIDS (disease)
Immunodeficiency
(fungal infections in; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Disease, plant
(fungal; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Geotrichum candidum
(geotrichosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Chemotherapy
(immunosuppression from, fungal infections in; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Histoplasma capsulatum
(infection with; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Skin-infecting fungi
(infections from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Mucor
(mucormycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Mycosis

(mycetoma; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Oomycetes
(oomycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Paecilomyces
(paecilimycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Paracoccidioides brasiliensis
(paracoccidioidomycosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Penicillium
(penicilliosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Rhinosporidium
(rhinosporidiosis from; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Aspergillus nidulans
Athlete's foot
Candida albicans
Candida dubliniensis
Candida glabrata
Candida guilliermondii
Candida krusei
Candida lusitaniae
Candida neoformans
Candida parapsilosis
Candida tropicalis
Cytotoxicity
Human
Issatchenkia orientalis
Mammalia
Mycosis
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Polyenes
Tetracyclines
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Drug interactions
Fungicides
(synergistic; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT Anti-inflammatory agents
(tetracyclines; substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT **389624-44-6P**
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)
IT **263761-05-3P** 351336-94-2P 380435-63-2P 389623-77-2P
389624-48-0P **389624-49-1P** **389624-67-3P**
389624-88-8P 460068-27-3P 460069-92-5P 460072-21-3P
460073-05-6P 460073-43-2P 460073-62-5P **460073-68-1P**
460073-82-9P 460074-13-9P 460074-36-6P 460074-56-0P 460074-58-2P
460074-69-5P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

IT 564-25-0 1397-89-3, Amphotericin B 5995-55-1 31642-30-5 35689-65-7
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RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

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460073-74-9 460073-76-1
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

IT 460073-78-3 460073-80-7 460073-84-1 460073-86-3 460073-88-5
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RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

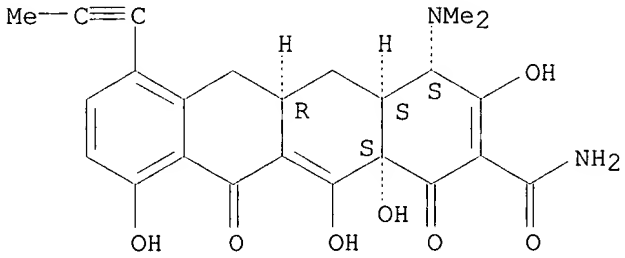
IT 74-99-7, Propyne 78-84-2, Isobutyraldehyde 103-55-9, N'-Benzyl-N,N-dimethylethylenediamine 103-76-4, 1-Piperazineethanol 111-30-8, Glutaraldehyde 122-78-1, Phenylacetaldehyde 622-77-5, Benzylcyanamide 808-26-4, Sancycline 871-84-1, 1,7-Octadiyne 914-00-1, Methacycline 4199-35-3 27329-70-0, 2-Formylfuran-5-boronic acid 50696-61-2, Cyclohexenylacetylene 55552-70-0, 3-Furanylboronic acid 107099-99-0, 2,5-Dimethoxyphenylboronic acid 128796-39-4, 4-Trifluoromethylphenylboronic acid 144025-03-6, 2,4-Difluorophenylboronic acid 149104-90-5 149934-19-0 380435-62-1 389140-04-9 **459810-03-8** 460076-33-9 460076-36-2 460076-37-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

IT 460076-34-0P 460076-35-1P 460076-38-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

IT **389624-44-6P**
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(substituted tetracycline compds. as synergistic antifungal agents in relation to cytotoxicity)

RN 389624-44-6 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-(1-propynyl)-, (4S,4aS,5aR,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:716027 HCAPLUS
DN 137:244597
TI Substituted tetracycline compounds as antifungal agents
IN Draper, Michael; **Nelson, Mark L.**
PA Paratek Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DT Patent
LA English

IC ICM A61K
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 1, 5, 26
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002072022	A2	20020919	WO 2002-US7502	20020314

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2001-275948P P 20010314
OS MARPAT 137:244597
AB Methods and compns. for treating fungal assocd. disorders in subjects are discussed. The method includes contacting the fungus with an effective amt. of a substituted tetracycline compd., such that the growth of said fungus is inhibited.
ST tetracycline antifungal agent
IT Actinomyces
(actinomycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Fungicides
(agrochem.; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Aspergillus
(aspergillosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Blastomyces
Mycosis
(blastomycosis, North American; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Blastomyces
Mycosis
(blastomycosis; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Candida albicans
(candidiasis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Drug delivery systems
(carriers; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Skin, disease
(chromoblastomycosis; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Mycosis
(coccidioidomycosis; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Tinea (skin disease)
(cruris; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Cryptococcus neoformans
(cryptococcosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Lymphatic system
(disease, epizootic lymphangitis; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Toxicity
(drug, immunosuppression from, fungal infections in; substituted

tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Entomophthorales
(entomophthoromycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Histoplasma farciminosum
(epizootic lymphangitis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Immunosuppression
(from chemotherapy, fungal infections in; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT AIDS (disease)
Immunodeficiency
(fungal infections in; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Disease, plant
(fungal; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Geotrichum candidum
(geotrichosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Chemotherapy
(immunosuppression from, fungal infections in; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Histoplasma capsulatum
(infection with; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Skin-infecting fungi
(infections from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Mucor
(mucormycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Mycosis
(mycetoma; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Oomycetes
(oomycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Paecilomyces
(paecilimycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Paracoccidioides brasiliensis
(paracoccidioidomycosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Penicillium
(penicilliosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Rhinosporidium
(rhinosporidiosis from; substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)
IT Athlete's foot
Candida
Candida albicans
Candida dubliniensis
Candida glabrata
Candida guilliermondii
Candida krusei
Candida lusitaniae
Candida neoformans
Candida parapsilosis
Candida tropicalis
Cytotoxicity
Fungicides

Human
Mammalia
Mycosis
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

IT Tetracyclines
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

IT 460072-70-2
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(a csubstituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

IT 31642-30-5 113164-67-3 161452-36-4 233585-94-9 233585-95-0
233586-04-4 233586-06-6 233586-12-4 330627-29-7 351336-94-2
365277-14-1 365277-36-7 365277-88-9 380435-74-5 380435-76-7
389139-17-7 389139-27-9 389139-31-5 389139-33-7 389139-41-7
389139-43-9 389139-45-1 389139-49-5 389139-56-4 389139-64-4
389139-72-4 389139-73-5 389139-74-6 389139-75-7 389139-76-8
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459809-63-3 **459809-81-5** **459809-94-0**
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460068-84-2 460068-85-3 460068-86-4 460068-87-5
460068-88-6 460068-90-0 460069-34-5 460069-38-9 460071-97-0
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460073-37-4 **460073-68-1** 460074-28-6 460074-52-6
460074-60-6 460074-73-1 460082-75-1 460082-77-3 460082-81-9
460082-82-0 460082-83-1 460082-84-2 460082-85-3 **460082-86-4**
460082-87-5 460082-88-6 460082-89-7 460082-90-0 460082-91-1
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

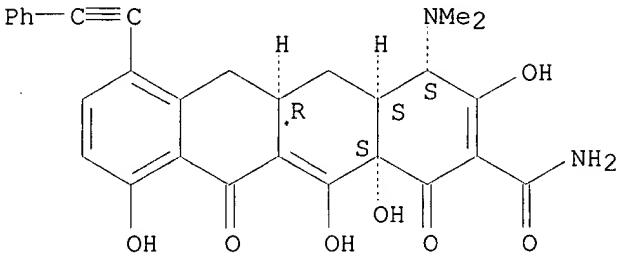
IT 693-02-7, 1-Hexyne 808-26-4, Sancycline 85199-06-0, 2,5-Dimethylphenylboronic acid 389139-46-2, 9-(4-Fluorophenylethynyl)minocycline 389140-04-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

IT 389139-70-2P, 9-(4'-Fluorophenylethyl)-Minocycline 460082-93-3P
460082-94-4P, 9-(2',5'-Dimethylphenyl)minocycline
RL: SPN (Synthetic preparation); PREP (Preparation)
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

IT **389623-86-3**
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substituted tetracycline compds. as antifungal agents in relation to cytotoxicity)

RN 389623-86-3 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-(phenylethynyl)-, (4S,4aS,5aR,12aS)-(9CI) (CA INDEX NAME)

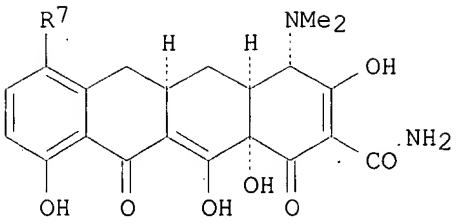
Absolute stereochemistry.



L12 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:51420 HCAPLUS
DN 136:102232
TI Preparation of 7-substituted tetracycline derivatives for pharmaceutical use as antibacterial agents
IN **Nelson, Mark L.; Frechette, Roger; Viski, Peter; Ismail, Mohamed; Bowser, Todd; Bhatia, Beena; Messersmith, David; McIntyre, Laura; Koza, Darrell; Rennie, Glen; Sheahan, Paul; Hawkins, Paul; Verma, Atul; Warchol, Tad; Bandarage, Upul**
PA Trustees of Tufts College, USA; Paratek Pharmaceuticals, Inc.
SO PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C237-00
CC 26-6 (Biomolecules and Their Synthetic Analogs)
Section cross-reference(s): 10
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002004407	A2	20020117	WO 2001-US20766	20010629
	WO 2002004407	A3	20020404		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2003055025	A1	20030320	US 2001-895812	20010629
	EP 1301466	A2	20030416	EP 2001-950674	20010629
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-216760P	P	20000707		
	US 2001-275576P	P	20010313		
	WO 2001-US20766	W	20010629		

OS MARPAT 136:102232
GI



I

AB 7-Substituted tetracycline derivs., such as I [R7 = NO2, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, amino, arylalkenyl, arylalkynyl, aminoalkyl, etc.], were prepd. for therapeutic use as antibacterial agents. Thus, 7-phenylsancycline I (R7 = Ph) was prepd. in 42% yield by arom. coupling reaction of 7-iodosancycline I (R7 = iodo) with PhB(OH)2 using Pd(OAc)2 and Na2CO3 in MeOH under an argon atm. at r.t. for 2 h. The prepd. tetracycline derivs. were tested for antibacterial activity against Escherichia coli, Enterococcus hirae, and Staphylococcus aureus.

ST tetracycline deriv prepn antibacterial agent; sancycline deriv prepn antibacterial agent

IT Antibacterial agents
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT 263761-01-9P 389624-24-2P **389624-36-6P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT 263760-96-9P 263760-98-1P 263760-99-2P 263761-02-0P 365277-42-5P
365277-44-7P 365277-45-8P 374748-06-8P 380435-62-1P 380435-63-2P
380435-65-4P 380435-76-7P 389623-67-0P 389623-72-7P 389623-74-9P
389623-77-2P 389623-80-7P 389623-82-9P **389623-84-1P**
389623-86-3P 389623-88-5P **389623-89-6P**
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389624-35-5P 389624-37-7P 389624-38-8P
389624-39-9P 389624-40-2P 389624-41-3P
389624-42-4P 389624-43-5P 389624-44-6P
389624-45-7P **389624-46-8P 389624-47-9P**
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389624-54-8P 389624-55-9P **389624-56-0P** 389624-57-1P
389624-58-2P 389624-59-3P **389624-60-6P 389624-61-7P**
389624-62-8P 389624-63-9P 389624-64-0P
389624-65-1P 389624-66-2P 389624-67-3P
389624-68-4P 389624-69-5P **389624-70-8P**
389624-71-9P 389624-72-0P 389624-73-1P
389624-74-2P 389624-75-3P 389624-76-4P

389624-77-5P 389624-78-6P 389624-79-7P
389624-80-0P 389624-81-1P 389624-82-2P **389624-83-3P**
389624-84-4P 389624-85-5P 389624-86-6P
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389624-95-7P 389624-96-8P 389624-97-9P 389624-98-0P
389624-99-1P 389625-00-7P 389625-01-8P 389625-02-9P 389625-03-0P
389625-04-1P 389625-05-2P 389625-06-3P 389625-07-4P 389625-08-5P
389625-09-6P 389625-10-9P 389625-11-0P 389625-12-1P 389625-13-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

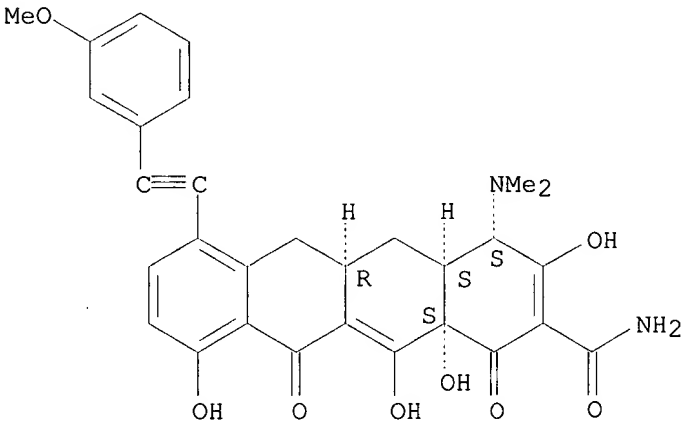
IT 98-80-6 623-47-2 808-26-4 871-84-1, 1,7-Octadiyne 1118-68-9 1679-18-1 1765-93-1 5679-00-5 7223-38-3 93501-84-9 127972-02-5 389625-14-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT 113164-67-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

IT **389624-36-6P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of 7-substituted tetracycline derivs. for pharmaceutical use as antibacterial agents)

RN 389624-36-6 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-[(3-methoxyphenyl)ethynyl]-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:51417 HCAPLUS
DN 136:102229
TI Preparation of 7,8 and 9-substituted tetracycline derivatives
IN **Nelson, Mark L.; Koza, Darrell**
PA Trustees of Tufts College, USA
SO PCT Int. Appl., 26 pp.

CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C237-00
CC 26-6 (Biomolecules and Their Synthetic Analogs)
Section cross-reference(s): 1, 10, 63
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002004404	A2	20020117	WO 2001-US20558	20010629
	WO 2002004404	A3	20020613		
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	WO 2002012170	A1	20020214	WO 2000-US21366	20000804
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1303479	A2	20030423	EP 2001-950582	20010629
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PRAI	US 2000-216656P	P	20000707		
	WO 2000-US21366	W	20000804		
	WO 2001-US20558	W	20010629		

OS MARPAT 136:102229
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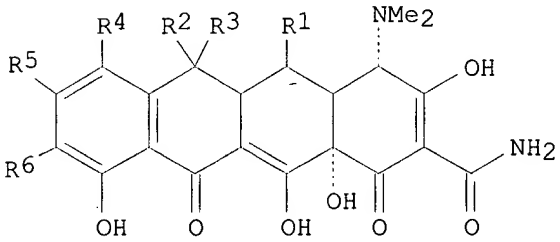


I

AB The 7,8 and 9-substituted tetracycline derivs. I (R1 = H, OH; R2, R3 = H, Me, OH; R4 = H, alkenyl, alkynyl, Ph, halophenyl, acyl, phenylalkynyl, heteroaryl, dimethylamino: R5 = H, Ph, nitrophenyl, halo, alkynyl; R6 = H, amino, acetamide, alkynyl; at least one of R4, R5, and R6 is not H) and their pharmaceutically acceptable salts were as antibacterial agents. Thus, tetracycline underwent iodination with NIS to give a mixt. of 7- and 9-iodotetracycline, of which the 7- isomer was treated AsPh3 in presence of Pd(PPh3)2Cl2 and CuI to give 7-phenyltetracycline. I were screened to detn. their in vitro antibacterial min. inhibitory concn. (no data).

ST tetracycline substituted prepn antibacterial
IT Antibacterial agents

Antibiotics
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

IT **263761-03-1P** 295356-13-7P 295356-15-9P 295356-16-0P
295356-17-1P 330627-27-5P 389139-16-6P 389570-43-8P 389570-44-9P
389570-45-0P 389570-46-1P 389570-48-3P 389570-49-4P
389570-50-7P 389570-51-8P 389570-52-9P **389570-53-0P**
389570-54-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

IT 60-54-8, Tetracycline 10592-13-9, Doxycycline hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

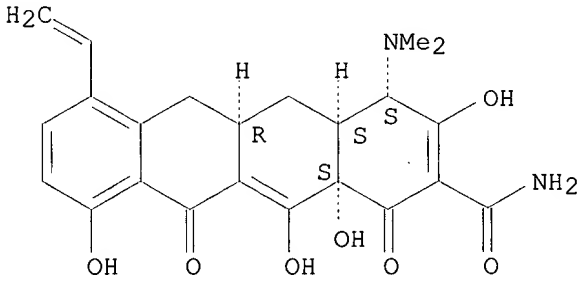
IT 120793-45-5P 161321-34-2P 295356-11-5P 295356-12-6P 330627-20-8P
389570-41-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

IT 389570-42-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

IT **263761-03-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 7,8 and 9-substituted tetracycline derivs. as antibacterial agents)

RN 263761-03-1 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

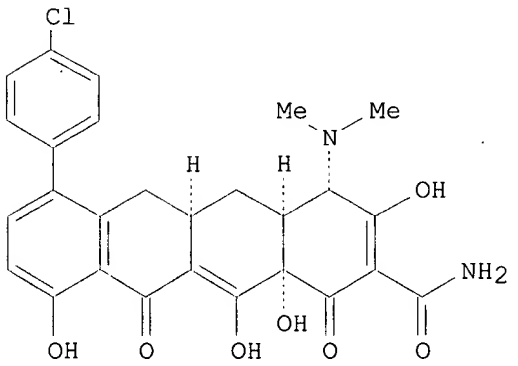


L12 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:208235 HCAPLUS
DN 134:252206
TI Methods of preparing substituted tetracyclines with transition metal-based chemistries
IN **Nelson, Mark L.; Rennie, Glen; Koza, Darrell J.**
PA Trustees of Tufts College, USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2

DT Patent
LA English
IC ICM C07C237-26
ICS C07C231-12; A61K031-65; A61P031-04
CC 26-6 (Biomolecules and Their Synthetic Analogs)
Section cross-reference(s): 10
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001019784	A1	20010322	WO 2000-US25040	20000913
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	BR 2000013993	A	20020702	BR 2000-13993	20000913
	EP 1240133	A1	20020918	EP 2000-961860	20000913
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003509404	T2	20030311	JP 2001-523365	20000913
	US 2002115644	A1	20020822	US 2001-768189	20010123
	US 2002128237	A1	20020912	US 2001-882273	20010615
	US 2002147182	A1	20021010	US 2001-895796	20010629
	US 6500812	B2	20021231		
PRAI	US 1999-154701P	P	19990914		
	US 2000-232091P	P	20000912		
	US 1999-234847	A	19990122		
	US 2000-178519P	P	20000124		
	US 2000-193879P	P	20000331		
	US 2000-193972P	P	20000331		
	US 2000-204158P	P	20000515		
	US 2000-212030P	P	20000616		
	US 2000-212139P	P	20000616		
	US 2000-212471P	P	20000616		
	WO 2000-US16672	W	20000616		
	US 2000-216580P	P	20000707		
	WO 2000-US25040	W	20000913		

OS CASREACT 134:252206; MARPAT 134:252206
GI



I

AB Substituted tetracyclinrderivs. were prepd. by combining a reactive tetracycline-based precursor and a reactive org. substituent precursor in

the presence of a transition metal catalyst. In one embodiment of the invention, a substituted tetracycline compd. may be prepd. by combining a reactive tetracycline-based precursor compd. such as an arene tetracycline diazonium salt, and a reactive org. substituent precursor, e.g., alkenes, substituted alkenes, vinyl monomers, aroms. and heteroaroms., in the presence of a transition metal catalyst, such as palladium chloride, under conditions such that a tetracycline compd. substituted with the org. substituent is formed. Such compds. may optionally act as intermediates for making other compds., e.g., hydrogenation of unsatd. groups on the substituent. Thus, sancycline-HCl was treated with N-iodosuccinimide in concd. H2SO4 to give 61% 7-iodosancycline and 22% 7,9-diodosancycline. 7-Iodosancycline was added to a degassed soln. of MeOH contg. Na2CO3 and Pd(OAc)2 and then 4-chlorophenylbroonic added to give 7-(4-chlorophenyl)sancycline (I). Antibacterial activity of several derivs. was tabulated.

ST tetracycline deriv prepn transition metal chem; antibacterial tetracycline deriv

IT Tetracyclines
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT Transition metals, uses
RL: CAT (Catalyst use); USES (Uses)
(organopalladium catalysts; methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 330627-29-7 330627-30-0 330627-31-1 330627-32-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 263760-99-2P 330627-21-9P 330627-22-0P 330627-26-4P 344771-54-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 3375-31-3 7447-39-4, Cupric chloride, uses 7647-10-1, Palladium chloride 13767-71-0, Cupric iodide 13965-03-2, Bistriphenylphosphinedichloropalladium 14220-64-5, Bisbenzonitriledichloropalladium 15956-28-2, Rhodium (II) acetate 51364-51-3 143006-99-9
RL: CAT (Catalyst use); USES (Uses)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 113164-67-3P 120793-45-5P 161321-34-2P 330627-20-8P 330627-23-1P 330627-25-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 263760-98-1P 263761-01-9P **263761-03-1P** 263761-08-6P 330627-24-2P 330627-27-5P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 57-62-5 79-10-7, Propenoic acid, reactions 79-57-2, Oxytetracycline 98-80-6, Phenylboronic acid 100-42-5, Styrene, reactions 127-33-3, Demeclocycline 141-32-2, Butyl acrylate 564-25-0, Doxycycline 751-97-3, Rolitetracycline 808-26-4, Sancycline 914-00-1, Methacycline 992-21-2, Lymecycline 1110-80-1, Pipacycline 1679-18-1, 4-Chlorophenylboronic acid 1765-93-1, 4-Fluorophenylboronic acid

4363-34-2, Etheneboronic acid 4599-60-4, Penimepicycline 6625-20-3, Sancycline hydrochloride 10118-90-8, Minocycline 10592-13-9, Doxycycline hydrochloride 15590-00-8, Etamocycline 15599-51-6, Apicycline 16259-34-0, Penimocycline 16545-11-2, Guamecycline 24067-17-2, 4-Nitrophenylboronic acid 29144-42-1, Chelocardin 31770-79-3, Meglucycline 149934-19-0 197958-29-5, 2-Pyridylboronic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

IT 171807-99-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Ahmad, N; JOUR CHEM SOC PAK 1990, V12(2), P168 HCAPLUS

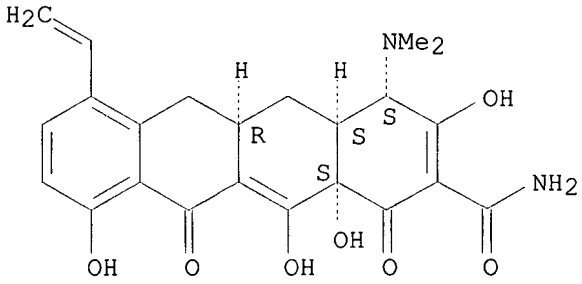
(2) Koza, D; ORGANIC LETTERS 2000, V2(6), P815 HCAPLUS

IT **263761-03-1P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(methods of prepg. substituted tetracyclines with transition metal-based chemistries)

RN 263761-03-1 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:137899 HCAPLUS

DN 132:279036

TI Synthesis of 7-Substituted Tetracycline Derivatives

AU **Koza, Darrell J.**

CS Department of Science and Allied Health, Mount Ida College, Newton, MA, 02459, USA

SO Organic Letters (2000), 2(6), 815-817
CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

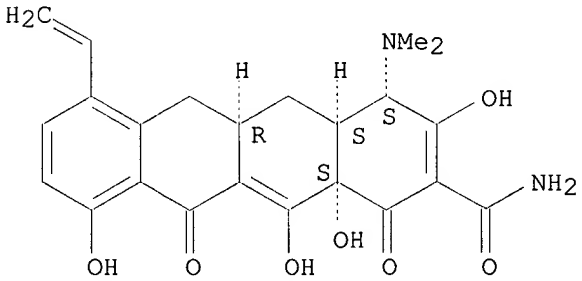
CC 26-6 (Biomolecules and Their Synthetic Analogs)

AB The synthesis of 7-substituted tetracycline derivs. has been accomplished in high yield from 7-halotetracyclines by modified Suzuki and Stille coupling protocols. These novel derivs. may serve as a new class of tetracycline antibiotics effective against multi-antibiotic-resistant bacteria.

ST tetracycline deriv synthesis; sancycline deriv synthesis

IT Stille coupling reaction
Suzuki coupling reaction
(synthesis of 7-substituted tetracycline derivs.)
IT Tetracyclines
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of 7-substituted tetracycline derivs.)
IT 98-80-6, Phenylboronic acid 960-16-7, Phenyltributyltin 994-89-8, Ethynyltributyltin 6625-20-3, Sancycline hydrochloride 7486-35-3, Vinyltributyltin 17151-47-2, (4-Fluorophenyl)tributyltin 17151-48-3, (4-Chlorophenyl)tributyltin 28611-39-4, (4-Dimethylaminophenyl)boronic acid 79048-32-1, (4-Nitrophenyl)tributyltin
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis of 7-substituted tetracycline derivs.)
IT 113164-67-3P, 7-Iodosancycline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of 7-substituted tetracycline derivs.)
IT 263760-96-9P 263760-98-1P 263760-99-2P 263761-01-9P 263761-02-0P **263761-03-1P 263761-05-3P** 263761-08-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of 7-substituted tetracycline derivs.)
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Beereboom, J; J Am Chem Soc 1960, V82, P1003 HCAPLUS
(2) Boothe, J; J Am Chem Soc 1960, V82, P1253 HCAPLUS
(3) Broschard, R; Science 1949, V109, P199 HCAPLUS
(4) Brown, A; J Chem Soc, Perkin Tran 1992, V1, P123
(5) Buchwald, S; J Am Chem Soc 1998, V120, P9722
(6) Finlay, A; Science 1950, V111, P85 HCAPLUS
(7) Hlavka, J; J Am Chem Soc 1962, V84, P1426 HCAPLUS
(8) McCormick, J; Antibiot Ann 1953, P81
(9) Mitscher, L; The Chemistry of Tetracycline Antibiotics 1978, V9 HCAPLUS
(10) Nicolaou, K; Tetrahedron Lett 1998, V39, P7665
(11) Pattenden, G; Synth Lett 1993, P215 HCAPLUS
(12) Petisi, J; J Med Chem 1962, V5, P538 HCAPLUS
(13) Redin, G; Antimicrob Agents Chemother 1966, P371 HCAPLUS
(14) Stille, J; Angew Chem, Int Ed Engl 1986, V25, P508
(15) van Honweling, C; F D A Papers 1969, P21
IT **263761-03-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of 7-substituted tetracycline derivs.)
RN 263761-03-1 HCAPLUS
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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FILE 'REGISTRY' ENTERED AT 12:18:54 ON 29 APR 2003

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 APR 2003 HIGHEST RN 506405-59-0
DICTIONARY FILE UPDATES: 27 APR 2003 HIGHEST RN 506405-59-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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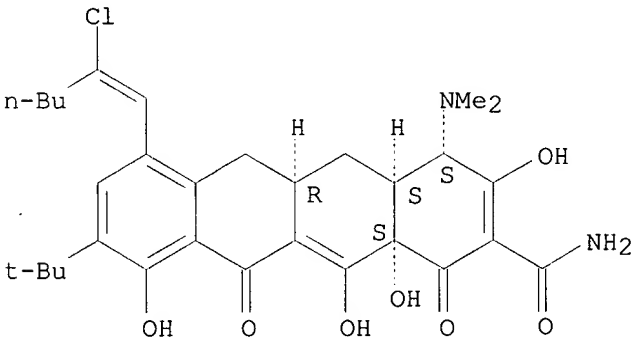
L6 ANSWER 5 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 488817-71-6 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(2-chloro-1-hexenyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C31 H39 Cl N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

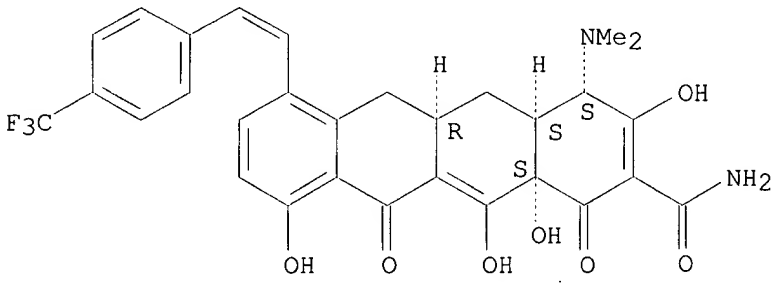
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L6 ANSWER 10 OF 91 REGISTRY COPYRIGHT 2003 ACS

RN 488817-66-9 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-[2-[4-(trifluoromethyl)phenyl]etheny l]-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H27 F3 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L6 ANSWER 15 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 488817-59-0 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(2-chloro-3-hydroxy-1-propenyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
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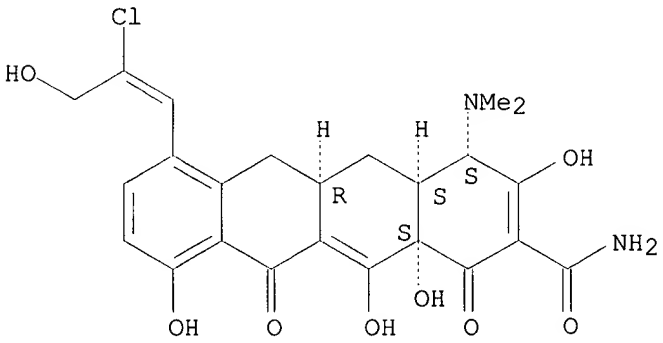
MF C24 H25 Cl N2 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry unknown.



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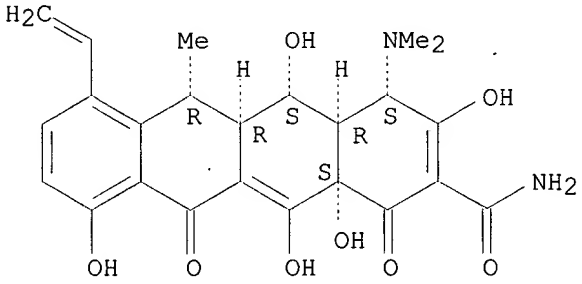
1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L6 ANSWER 20 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 488817-25-0 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H26 N2 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



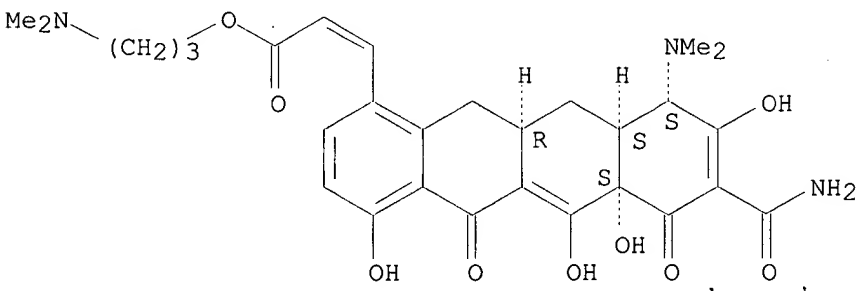
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L6 ANSWER 25 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 488815-47-0 REGISTRY
CN 2-Propenoic acid, 3-[(6aS,10S,10aS,11aR)-8-(aminocarbonyl)-10-(dimethylamino)-5,6a,7,10,10a,11,11a,12-octahydro-4,6,6a,9-tetrahydroxy-5,7-dioxo-1-naphthacenyl]-, 3-(dimethylamino)propyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H35 N3 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry unknown.



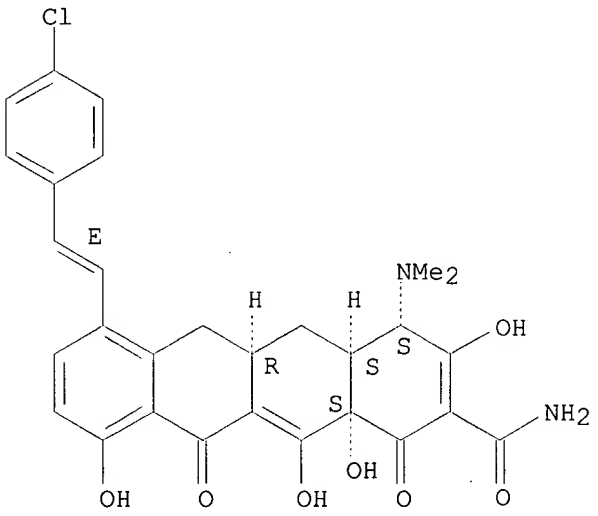
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L6 ANSWER 30 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 460069-76-5 REGISTRY
CN 2-Naphthacenecarboxamide, 7-[(1E)-2-(4-chlorophenyl)ethenyl]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H27 Cl N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry as shown.



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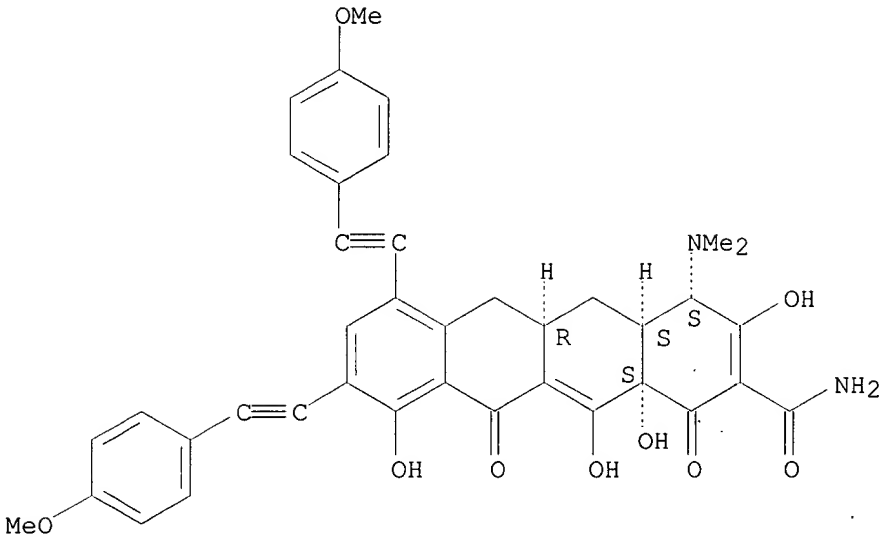
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:244598

L6 ANSWER 35 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 459809-43-9 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7,9-bis[(4-methoxyphenyl)ethynyl]-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C39 H34 N2 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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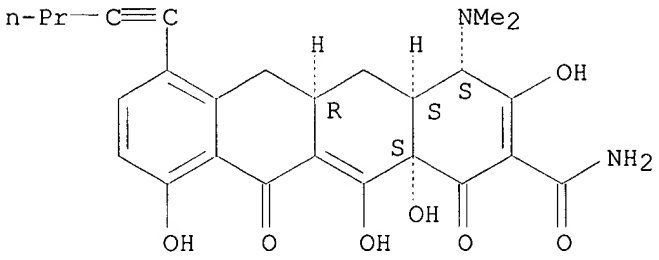
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:247552

L6 ANSWER 40 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-78-6 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-(1-pentynyl)-, (4S,4aS,5aR,12aS)-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H28 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

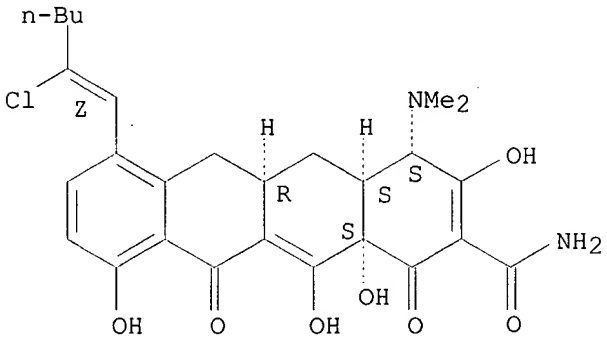
REFERENCE 2: 137:244598

REFERENCE 3: 137:244597

REFERENCE 4: 136:102232

L6 ANSWER 45 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-65-1 REGISTRY
CN 2-Naphthacenecarboxamide, 7-[(1Z)-2-chloro-1-hexenyl]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H31 Cl N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

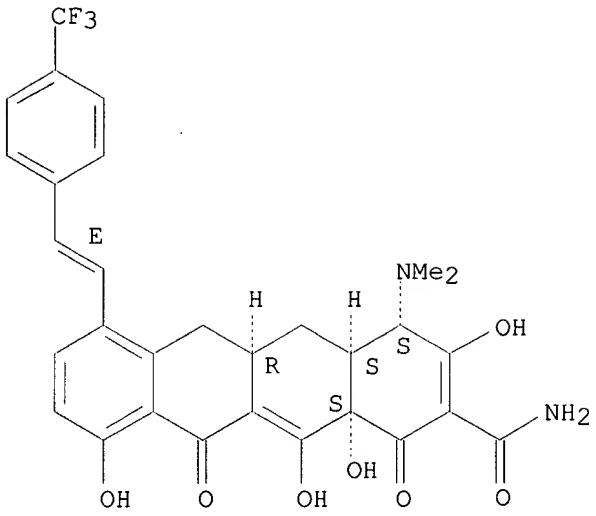
REFERENCE 1: 137:244598

REFERENCE 2: 137:244597

REFERENCE 3: 136:102232

L6 ANSWER 50 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-53-7 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-[(1E)-2-[4-(trifluoromethyl)phenyl]ethenyl]-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H27 F3 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

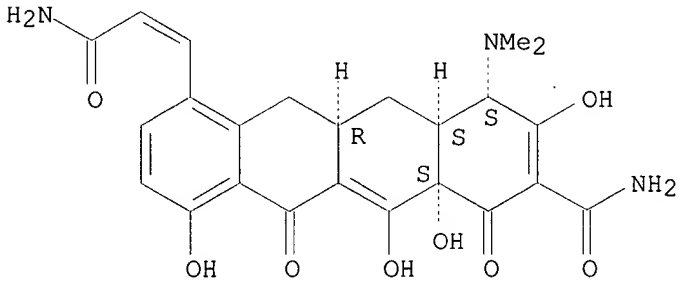
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:244598

REFERENCE 2: 136:102232

L6 ANSWER 55 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-46-8 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(3-amino-3-oxo-1-propenyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H25 N3 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

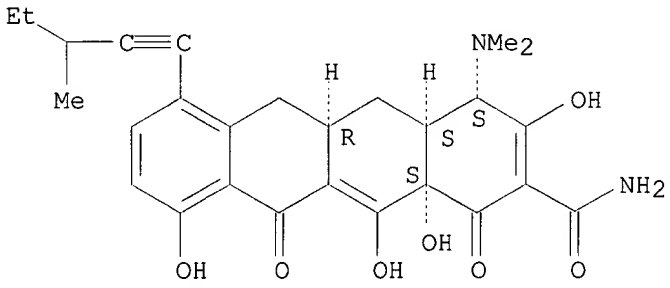
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 136:102232

L6 ANSWER 60 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-38-8 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-(3-methyl-1-pentynyl)-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H30 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

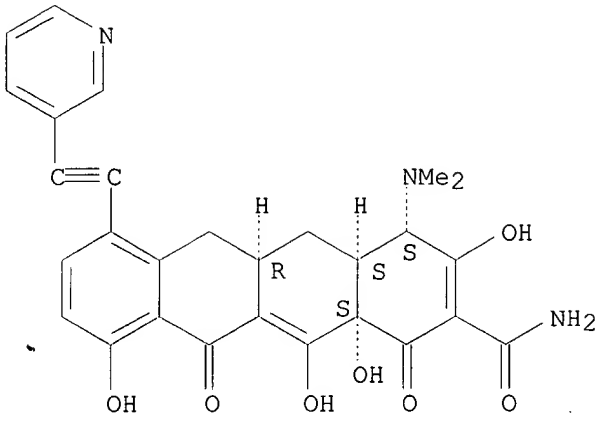
REFERENCE 3: 137:244598

REFERENCE 4: 137:244597

REFERENCE 5: 136:102232

L6 ANSWER 65 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-27-5 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-(3-pyridinylethynyl)-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H25 N3 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

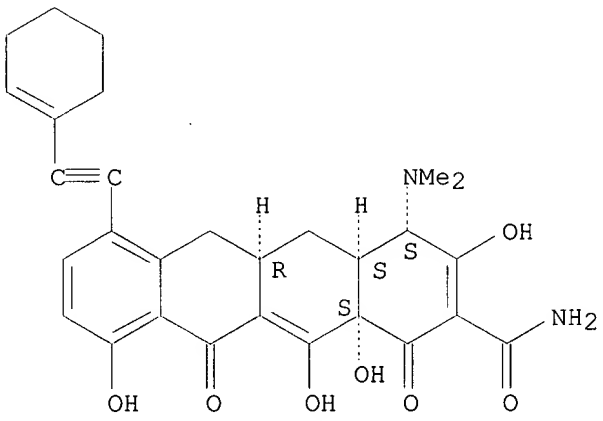
REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

REFERENCE 3: 136:102232

L6 ANSWER 70 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-18-4 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(1-cyclohexen-1-ylethynyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H30 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)

5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

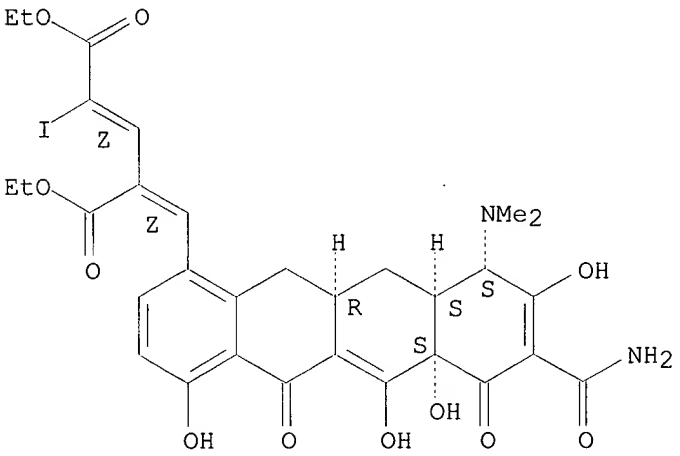
REFERENCE 3: 137:244598

REFERENCE 4: 137:244597

REFERENCE 5: 136:102232

L6 ANSWER 75 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-10-6 REGISTRY
CN 2-Pentenedioic acid, 4-[[(6aS,10S,10aS,11aR)-8-(aminocarbonyl)-10-(dimethylamino)-5,6a,7,10,10a,11,11a,12-octahydro-4,6,6a,9-tetrahydroxy-5,7-dioxo-1-naphthacenyl]methylene]-2-iodo-, diethyl ester, (2Z,4Z)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C31 H33 I N2 O11
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

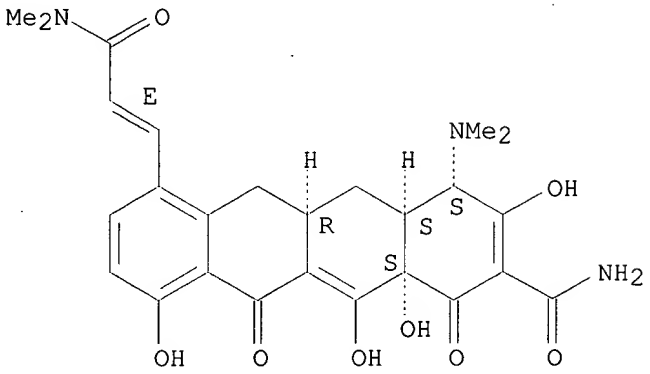
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:333118

REFERENCE 2: 136:102232

L6 ANSWER 80 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389624-00-4 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-[(1E)-3-(dimethylamino)-3-oxo-1-propenyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H29 N3 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

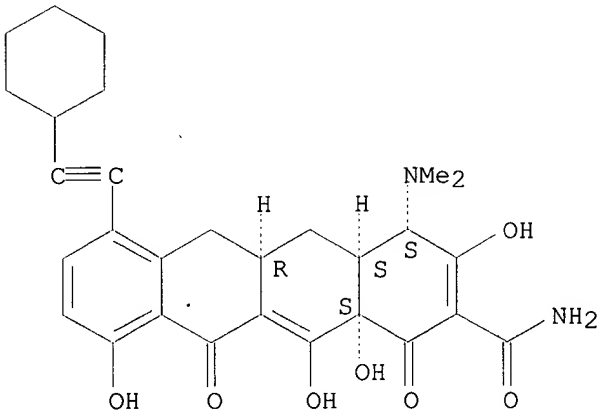
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:333118

REFERENCE 2: 136:102232

L6 ANSWER 85 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 389623-89-6 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(cyclohexylethynyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H32 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

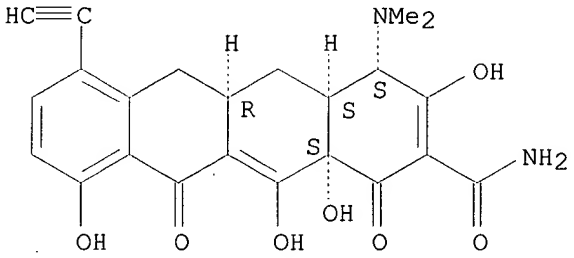
REFERENCE 3: 137:244598

REFERENCE 4: 137:244597

REFERENCE 5: 136:102232

L6 ANSWER 90 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 263761-05-3 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethynyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7-Ethynylsancycline
FS STEREOSEARCH
MF C23 H22 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

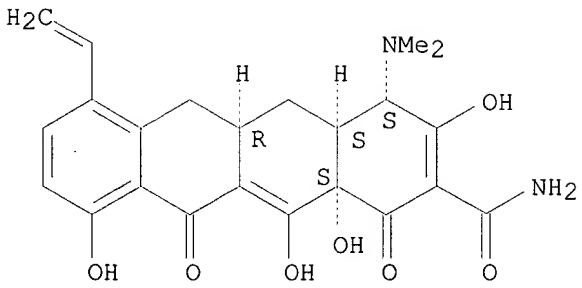
REFERENCE 1: 137:247552

REFERENCE 2: 137:244598

REFERENCE 3: 132:279036

L6 ANSWER 91 OF 91 REGISTRY COPYRIGHT 2003 ACS
RN 263761-03-1 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-ethenyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 330627-28-6
MF C23 H24 N2 O7
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:102229

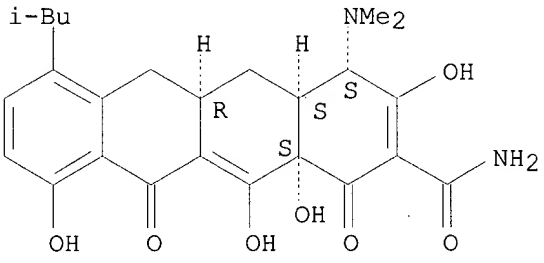
REFERENCE 2: 134:252206

REFERENCE 3: 132:279036

=> d l7 ide can 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

L7 ANSWER 5 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 488820-20-8 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-(2-methylpropyl)-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H30 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

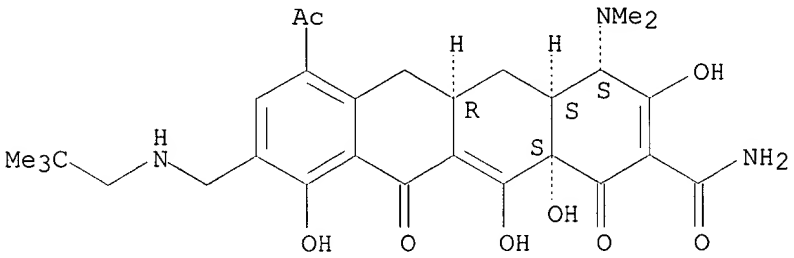
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L7 ANSWER 10 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 488819-90-5 REGISTRY
CN 2-Naphthacenecarboxamide, 7-acetyl-4-(dimethylamino)-9-[[(2,2-

dimethylpropyl)amino]methyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H37 N3 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



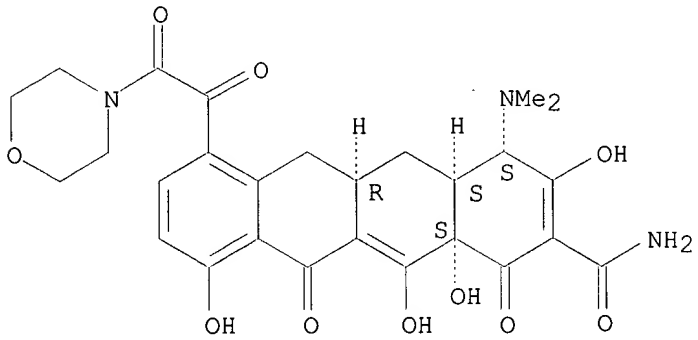
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L7 ANSWER 15 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 488818-28-6 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-(4-morpholinyloxoacetyl)-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H29 N3 O10
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

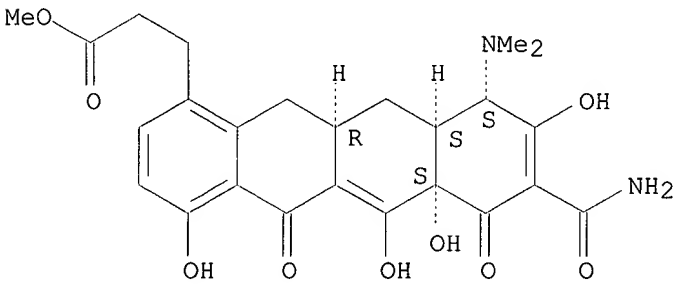
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L7 ANSWER 20 OF 75 REGISTRY COPYRIGHT 2003 ACS

RN 488817-80-7 REGISTRY
CN 1-Naphthacenepropanoic acid, 8-(aminocarbonyl)-10-(dimethylamino)-5,6a,7,10,10a,11,11a,12-octahydro-4,6,6a,9-tetrahydroxy-5,7-dioxo-, methyl ester, (6aS,10S,10aS,11aR)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H28 N2 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



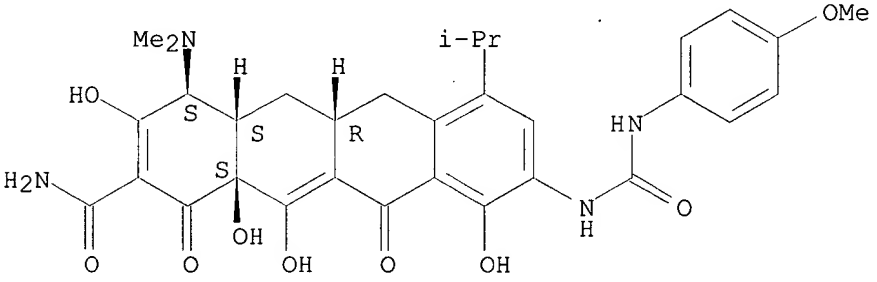
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

L7 ANSWER 25 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 460073-66-9 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-9-[[[(4-methoxyphenyl)amino]carbonyl]amino]-7-(1-methylethyl)-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C32 H36 N4 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



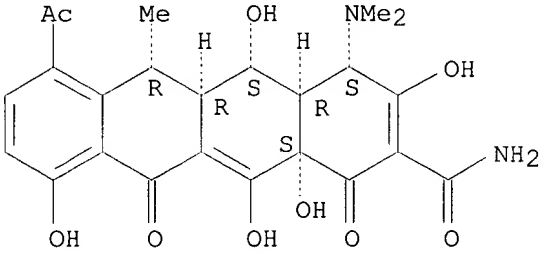
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:244598

L7 ANSWER 30 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 460068-84-2 REGISTRY
CN 2-Naphthacenecarboxamide, 7-acetyl-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H26 N2 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

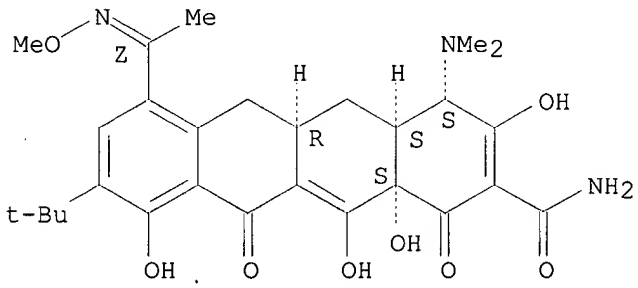
REFERENCE 1: 138:117673

REFERENCE 2: 137:244598

REFERENCE 3: 137:244597

L7 ANSWER 35 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 459809-99-5 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-7-[(1Z)-1-(methoxyimino)ethyl]-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H35 N3 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:333118

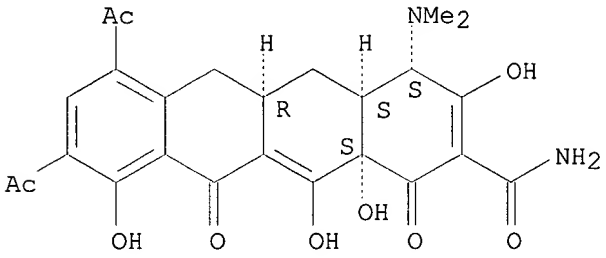
REFERENCE 2: 137:247552

REFERENCE 3: 137:244598

REFERENCE 4: 137:244597

L7 ANSWER 40 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 459809-67-7 REGISTRY
CN 2-Naphthacenecarboxamide, 7,9-diacetyl-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H26 N2 O9
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

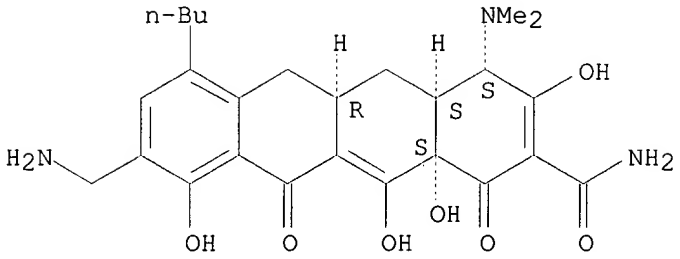
REFERENCE 2: 137:333118

REFERENCE 3: 137:247552

REFERENCE 4: 137:244598

L7 ANSWER 45 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 459809-56-4 REGISTRY
CN 2-Naphthacenecarboxamide, 9-(aminomethyl)-7-butyl-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H33 N3 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

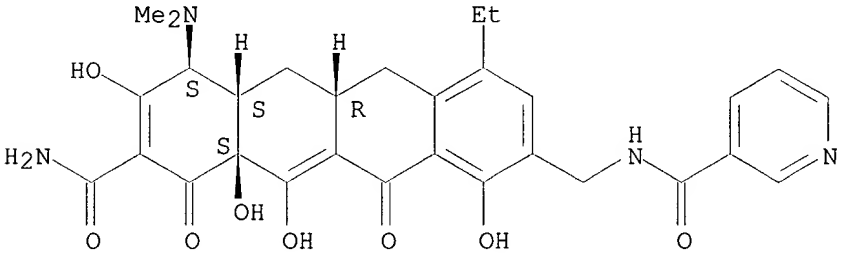
REFERENCE 1: 138:117673

REFERENCE 2: 137:247552

REFERENCE 3: 137:244598

L7 ANSWER 50 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 459809-46-2 REGISTRY
CN 3-Pyridinecarboxamide, N-[[(5aR,6aS,7S,10aS)-9-(aminocarbonyl)-7-(dimethylamino)-4-ethyl-5,5a,6,6a,7,10,10a,12-octahydro-1,8,10a,11-tetrahydroxy-10,12-dioxo-2-naphthacenyl]methyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H32 N4 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

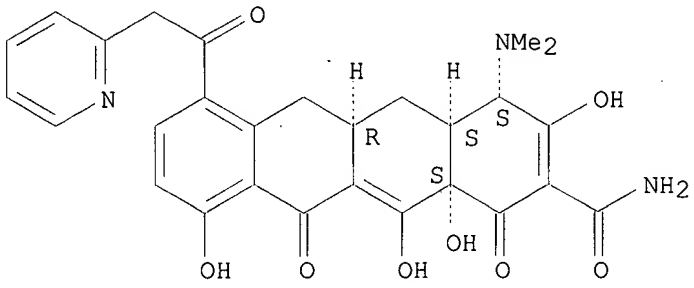
REFERENCE 3: 137:247552

REFERENCE 4: 137:244598

L7 ANSWER 55 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 389624-83-3 REGISTRY

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-(2-pyridinylacetyl)-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H27 N3 O8
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

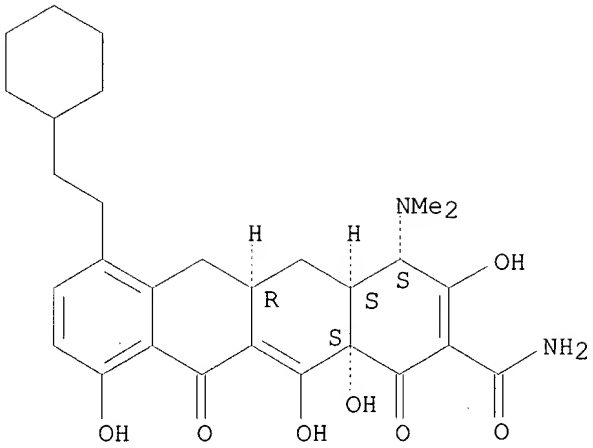
REFERENCE 2: 137:333118

REFERENCE 3: 137:244598

REFERENCE 4: 136:102232

L7 ANSWER 60 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 389624-73-1 REGISTRY
CN 2-Naphthacenecarboxamide, 7-(2-cyclohexylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H36 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

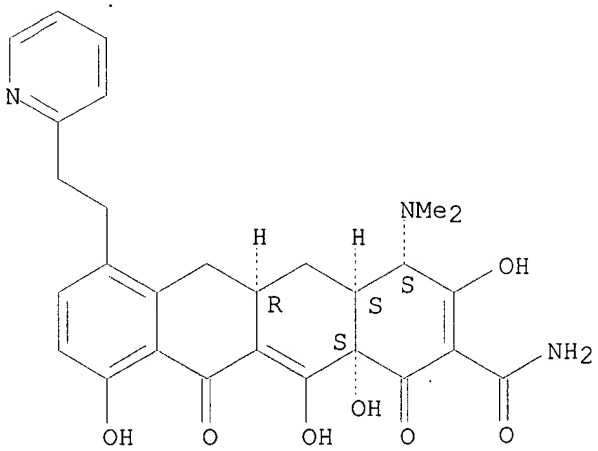
REFERENCE 2: 137:333118

REFERENCE 3: 137:244598

REFERENCE 4: 136:102232

L7 ANSWER 65 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 389624-63-9 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-7-[2-(2-pyridinyl)ethyl]-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H29 N3 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

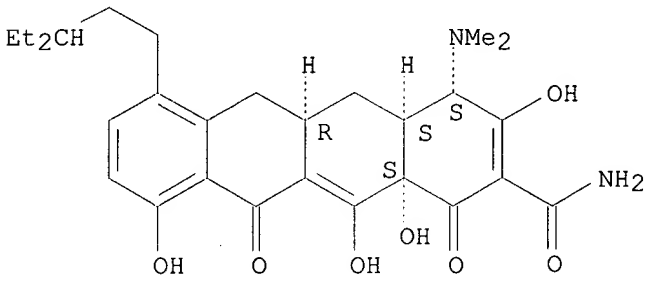
2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 136:102232

L7 ANSWER 70 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 389624-39-9 REGISTRY
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-7-(3-ethylpentyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C28 H36 N2 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

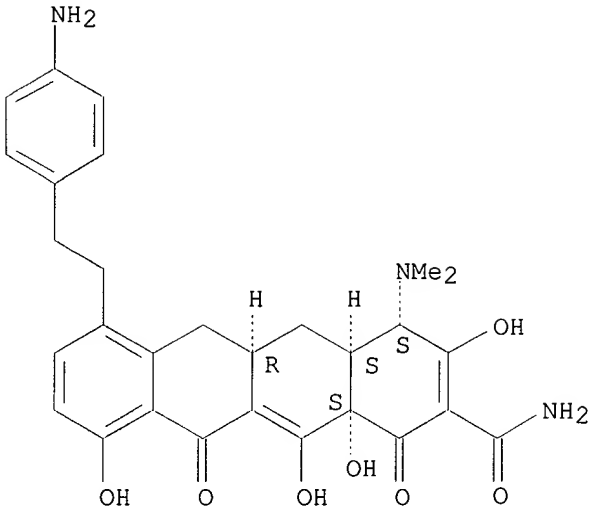
REFERENCE 3: 137:244598

REFERENCE 4: 137:244597

REFERENCE 5: 136:102232

L7 ANSWER 75 OF 75 REGISTRY COPYRIGHT 2003 ACS
RN 389624-01-5 REGISTRY
CN 2-Naphthacenecarboxamide, 7-[2-(4-aminophenyl)ethyl]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, (4S,4aS,5aR,12aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H31 N3 O7
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:117673

REFERENCE 2: 137:333118

REFERENCE 3: 136:102232

=> d his

(FILE 'HOME' ENTERED AT 12:12:12 ON 29 APR 2003)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 12:12:19 ON 29 APR 2003
L1 STR
L2 8 S L1
L3 166 S L1 FUL
SAV TEMP L3 GERSTL895/A
L4 STR L1
L5 5 S L4 SAM SUB=L3
L6 91 S L4 FUL SUB=L3
SAV L6 GERSTL895A/A TEMP
L7 75 S L3 NOT L6

FILE 'HCAPLUS' ENTERED AT 12:15:00 ON 29 APR 2003
L8 9 S L6
L9 6 S L7
L10 6 S L8 AND L9
L11 9 S L8-L10
L12 9 S L11 AND (NELSON ? OR FRECHETTE ? OR VISKI ? OR ISMAIL ? OR BO

FILE 'HCAPLUS' ENTERED AT 12:17:19 ON 29 APR 2003

FILE 'USPATFULL, USPAT2' ENTERED AT 12:17:23 ON 29 APR 2003
L13 3 S L6
L14 2 S L7
L15 3 S L13,L14

FILE 'HCAPLUS, USPATFULL' ENTERED AT 12:17:39 ON 29 APR 2003
L16 12 DUP REM L12 L15 (0 DUPLICATES REMOVED)

FILE 'REGISTRY' ENTERED AT 12:18:00 ON 29 APR 2003

FILE 'USPATFULL, USPAT2' ENTERED AT 12:18:15 ON 29 APR 2003

FILE 'HCAPLUS' ENTERED AT 12:18:28 ON 29 APR 2003

FILE 'REGISTRY' ENTERED AT 12:18:54 ON 29 APR 2003